Where the voters approve spending

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BUSINESS WEEK

How business plans to invest in '61

Page 46)

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NOV. 19, 1960

Milan - where a new style of Italian businessman powers a business renaissance.

(Business Abroad)

STORAGE COLLECTION

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Abominable Snowman stopped cold

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Shell Chemical contribution that paves the way for safer, more comfortable travel.



NEW YORK



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1947-49=100					170
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1958 1959			1960		-
	1953-55	Year	Month	Week	§ Lai
LICINIECE WIFEL INDEX	Average	Ago	Ago	Ago	Wee
USINESS WEEK INDEX (chart)	133.3	142.1	148.0	144.6r	144.
CONTICTION					
RODUCTION	6.000				
Steel Inget (thous. of tons)	2,032	2,233	1,579	1,468r	1,4
Automobiles Engineering const. awards (Eng. News-Rec. 4-wk. daily av. in thous.)	125,553 \$52,412	64,233 \$60,296	144,056 \$77,374	145,537r \$62,442	\$65,6
Electric power (millions of kilowatt-hours)	10,819	13,270	13,736	13,982	14,1
Crude oil and condensate (daily av., thous. of bbls.)	6,536	6,876	6,824	6,940	6,5
Bituminous coal (daily av., thous. of tons)	1,455	1,307	1,353	1,332 r	1,3
Paperboard (fons)	247,488	331,839	326,613	308,733	325,2
RADE					
Carloadings: miscellaneous and L.c.I (daily av., thous. of cars)	70	60	61	60	
Carloadings: all others (daily av., thous. of cars)	47	39	47	44	
Department store sales index (1947-49 = 100, not seasonally adjusted)	121	155	155	149	1
Business failures (Dun & Bradstreet, number)	198	285	326	317	2
RICES					
Industrial raw materials, daily index (BLS, 1947-49 = 100)	89.2	95.2	89.4	87.6	87
Feedstuffs, daily index (BLS, 1947-49 = 100)	90.5	73.8	75.8	76.0	76
Print cloth (spot and nearby, yd.)	19.8∉	21.8∉	18.4∉	18.1∉	18.
Finished steel, Index (BLS, 1947-49 = 100)	143.9	186.8	186.2	186.2	186
Scrap steel composite (Iron Age, 10n)	\$36.10	\$46.17	\$29.50	\$28.33	\$28.
Copper (electrolytic, delivered price, E&MJ, lb.)	32.394¢ 20.6¢	35.225¢ 24.7¢	30.000€	30.000∉	30.00
Aluminum, primary pig (U. S. del., E&MJ, lb.)	11	23.76¢	23.01¢	26.0¢ 23.04¢	26. 23.0
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.34	\$2.06	\$1.99	\$1.99	\$2.
Cotton, daily price (middling, 1 in., 14 designated markets, lb.)	34.57¢	31.59€	30.20∉	30.19∉	30.2
Wool tops (Boston, Ib.)	\$1.96	\$1.85	\$1.65	\$1.66	\$1.
NANCE					
	31.64	56.72	54.53	E4 00	
500 stocks composite, price index (S&P's, 1941-43 = 100)	3.59%	5.28%	5.12%	54.80 5.09%	55. 5.07
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate)	2-21/8 %	4 5/8 %	3 % %	31/8%	31/8
ANKING (Millions of Dollars)					
Demand deposits adjusted, reporting member banks	††	60,837	58,553	59,794	58,8
Total loans and investments, reporting member banks Commercial, industrial and agricultural loans, reporting member banks	††	103,146 30,669	105,571 32,590	107,806 32,729	106,7 32,6
U.S. Gov't guaranteed obligations held, reporting member banks	++	27,693	27,473	29,305	28,8
Total federal reserve credit outstanding	26,424	28,651	28,568	28,662	29,2
Gold Stock	21,879	19,584	18,583	18,119	18,5
ONTHLY FIGURES OF THE WEEK		1953-55	Year	Month	Late
		Average	Ago	Ago	Mon
Retail sales (seasonally adjusted, in billions)		\$14.5	\$18.3	\$18.0	\$18
Wholesale prices (U. S. Dept. of Labor BLS, 1947-49=100)		110.4 \$158.1	119.1 \$233.1	119.2 \$240.8	\$23
Employment (in millions)		62.2	66.8	67.8	\$23
Unemployment (in millions)		2.5	3.3	3.4	
Average weekly earnings in manufacturingOctober		\$73.36	\$89.06	\$90.85	\$91.

TREVISED.



PFAUDLER NUCERITE*

Here's a material of construction that copes with high temperature, impact, and corrosion.

What processes, heretofore held back for lack of a proper material, will you explore first with Nucerite?

explore first with Nucerite?
For example, if corrosion at high temperatures is a problem, Pfaudler® Nucerite could be the answer, since it resists corrosive vapors at temperatures that would destroy most metals in minutes.

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Impact strength? Only a minor sur-

Impact strength? Only a minor surface crush is what you get on Nucerite with a point-of-impact force eighteen times greater than what's

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WHAT IT IS. Nucerite is properly classified as a family of ceramic-metal composites in which a ceramic formulation is physically and chemically bonded to a structural base metal.

NOT A GLASSED STEEL. After the ceramic component is applied and fired on, controlled nucleation and crystallization take place during heattreatment as a result of agents which act as centers of nucleation.

This leads to a ceramic structure with a large number of very small crystals and results in a tough ceramic-metal composite with a unique combination of properties.

Today, Nucerite is a laboratory achievement.

You are invited to make inquiries on possible applications for it and investigate field testing programs. The above lab test data are detailed in Bulletin 999. Please direct your inquiries to our Pfaudler Division, Dept. FO-120, Rochester 3, N. Y.

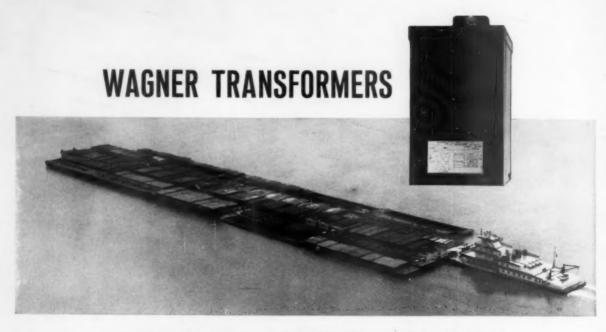
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*Patent applied for



PFAUDLER PERMUTIT INC.

oith plants in Germany, Great Britain, Canada, Mexico, Japan, as well as the U.S.A.





RIDE OL' MAN RIVER

Out in the channel, that's Federal Barge Lines' M.V. UNITED STATES. Designed and built by St. Louis Shipbuilding & Steel Co., she's the most powerful towboat on America's inland waterways. Headed up the Mississippi, this 8,500 horsepower giant pushes a record-breaking 42 barges, the equivalent of seven and one half acres. The boat is designed to push 40,000 tons of cargo, the capacity of a freight train 1,000 cars long.





You'll find seven Wagner Dry-Type General Purpose Transformers on duty aboard the UNITED STATES. Six 10 Kva and one 7½ Kva transformers (all 480 volt primary, 120/240 volt secondary, with 2 extra primary taps) are used to power this muscled lady's lighting system, small motors, and most of her navigation equipment.

Ashore or afloat, Wagner Type AE Transformers can be used for all general purpose applications, including those where noise must be minimized. They have a low sound level, the result of encasing smaller Form W core and coils in solid epoxy compound...give you a whisper-quiet transformer that can be used anywhere noise would be a nuisance.

Wagner Type AE Transformers have insulation protection suitable for continuous operation at $80^{\circ}\mathrm{C}$ in a $40^{\circ}\mathrm{C}$ ambient. All parts are sealed from dust, moisture, and corrosion by the epoxy compound. Naturally, every unit is built to conform to all applicable standards of ASA and NEMA.

Wagner Type AE Transformers can be installed indoors or out... anywhere they will not be submerged or exposed to injurious fumes in concentration. Compact and lightweight, they can be mounted in any position at any angle, on walls, floors, or ceilings.

Like to know more? Wagner branches and distributors have all the details. There's one near you, listed in your 'phone book. Call or write. Soon.



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READERS REPORT

A Car on the Road

Dear Sir:

I have read your article GM Bucks Buyer Resistance [BW-Nov.5'60,p30] . . . You have interviewed dealers-why not try and interview prospective buyers for their reasons for not buying the new cars?

. Buvers who are not compelled, because of the condition of their old cars, refuse to purchase a car that is as uncomfortable to get in and out of as recent models have been. This year . . . you are still sitting on the floor and a 6-footer still bumps his head getting in. . . .

The auto manufacturers are trying to cram an unpalatable product down the buyer's throat and he's resisting . . . when the manufacturers get hep, the resistance will fade away.

WILLIAM WACHS

SHAKER HEIGHTS, OHIO

Dear Sir:

I understand that one of the best advertisements that a car manufacturer can have for his product is a car on the road.

Three weeks ago I ordered a new Buick from my dealer in White Plains, but to this day he has not been able to give a production date for the car because the factory claims that they are short of "trim."

Therefore, before the automobile industry complains about poor sales, let them make delivery on the orders that they have. I have two friends who might be convinced into buying a GM car if and when they see my purchase.

HUGO H. BEIT

WHITE PLAINS, N. Y.

TV Debates

Dear Sir:

In The Trend [BW-Oct.22'60, p176] comment was made concerning the television debates. I want to assure you that I am in a reasonably relaxed and pleasant frame of mind but your comment is not untypical of what we broadcasters expect to see in our favorite maga-

I would like to suggest a couple, of questions in response to your opinion and observation.

Had the television networks not offered free time to the Presidential candidates to participate in these debates, would you have accused them of being too interested in en-



By its LOCATION?

Then consider the fact that, for 57 years, The First National Bank of Miami has been strategically located at the economic hub of the Americas—in constant touch with dynamic Florida and growing

Latin America. Banker or businessman—when you require a banking connection in Florida, the facts recommend First National...

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MEMBER: FEDERAL RESERVE SYSTEM
FEDERAL DEPOSIT INSURANCE CORPORATION
BANKERS ASSOCIATION FOR FOREIGN TRADE



MIAMI, FLORIDA

tertainment and not enough in en-

Had the networks insisted that these debates take into consideration all of the trappings of entertainment would you have remained silent in this obvious interference with the sober and thoughtful remarks of two citizens seeking the highest public office of our land?

Would you not have had any opinion if the broadcasters and the candidates together had insisted that only a truly academic development of a debate would be sufficient to properly display the reasoning powers of these men as we voters consider them for public trust?

Would you have found that the broadcasters were being less than sincere if they had refused to present the debates unless they were absolutely performed on the standard set forth by the broadcasters?

My only reason for these now academic questions to you are that broadcasters generally are getting used to criticism for criticism's sake. Your viewpoints seemed to me to be just that.

ELDON CAMPBELL

WFBM INDIANAPOLIS, IND.

Bid Rigging

Dear Sir:

With reference to your item concerning bid rigging [BW—Oct.29 '60,p32], is it not ironic that it is a Republican Administration that is prosecuting these cases? The odds are high that most of those being prosecuted learned the practice under compulsion of the NRA act during the Roosevelt "new deal" Administration in the early 30s.

I'd like to add a suggestion that you run an article on the compulsory collusion that was part of the NRA. Many younger men in business have no knowledge of this background.

CHARLES P. HABER

DALLAS, TEX.

Gold Cover Shines

Dear Sir:

... I particularly want to compliment your company for the interesting change in cover on the gold problem [BW—Oct.20'60]. Not only did the cover highlight the importance of this situation, but the article inside was most informative also.

CHARLES LAPPEN

VICE-PRESIDENT
THE ENGLANDER CO.
CHICAGO, ILL.

Long Distance pays off in extra sales



"We prospect by phone-and turn up sales leads coast to coast"

says Robert L. Nawman, of Benner-Nawman Inc., Oakland, California

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"This was \$37,000 in new orders for our fabricated steel products—at a cost for the calls of about \$90."

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Long Distance pays off! Use it now . . . for all it's worth!

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Buffalo to Cleveland			0	70¢
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Milwaukee to Philadelphia				\$1.45
San Francisco to Detroit				\$2.10

These are day raies, Station-to-Station, for the first three minutes. Add the 10% federal excise tax.

BELL TELEPHONE SYSTEM



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NO INVESTMENT... NO UPKEEP

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Just one budgetable check per week includes all these

Hertz services: complete truck maintenance, garaging, washing, insurance and emergency road service. Hertz also supplies replacement trucks when needed—and extra trucks for peak periods. And, the Hertz network of local truck stations throughout the U. S. and Canada is fully-staffed and fully-equipped to provide fast, convenient service whenever it's needed.

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Or write for this booklet—"How To Get Out of the Truck Business"—to: HERTZ TRUCK LEASE, 660 Madison Avenue, N.Y. 21, N.Y., Dept. A-1119.

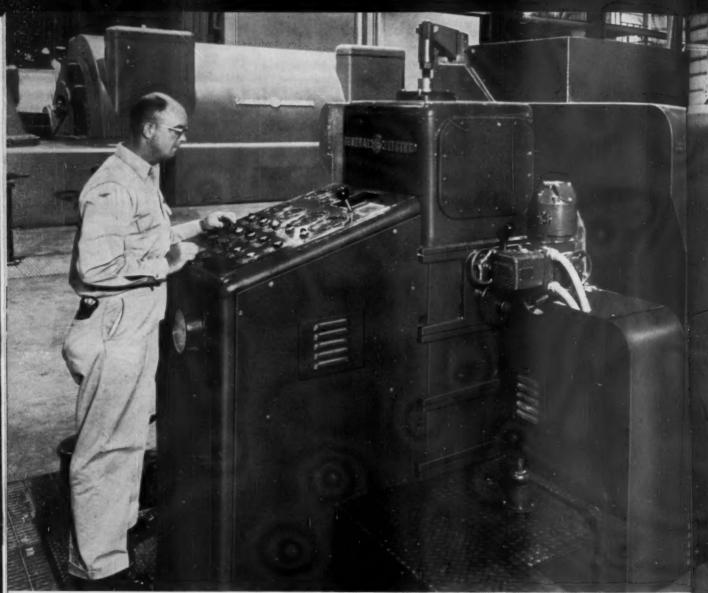




TRUCKS



HERTZ ALSO RENTS TRUCKS BY THE HOUR, DAY OR WEEK



Boiler-feed-pump turbine and main turbine-generator rated 175,000 kw at Dickerson Station, Potomac Electric Power Co.

99.7% RELIABILITY

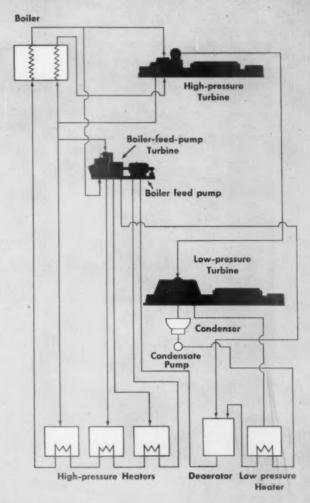
That's the record to date for General Electric boiler-feed-pump turbines

> General Electric Turbine-Generators Help Keep Power Costs Low



Large steam turbine-generators for base load 100,000 kw and up





Boiler-feed-pump turbine extracts steam from main turbine to provide economical driving force for boiler feed pump. Result is greater station efficiency and more saleable kilowatts.

Five major electric utilities* have had a 99.7% reliability record to date with General Electric turbine drives for boiler feed pumps.

This in-service availability was achieved by the first 17 units put into operation, and represents the total number of boiler-feed-pump turbines installed by the General Electric Company to date.

Driving boiler feed pumps in large central stations, these units have a combined total of more than 23 turbine-years of operation—yet forced outage has, to date, amounted to less than 15 days.

This 99.7% reliability record is the result of General Electric's long association with the electric utility industry—working with utilities in designing and building turbine

equipment to meet their needs for generation station efficiency.

To improve station efficiency and increase net saleable kilowatts, specify General Electric turbine drives for your boiler feed pumps. Fourteen utilities have, since 1957, for a total of 44 units ordered.

For more information, contact your General Electric Sales Engineer, or write for Bulletin GEA-6541, Section 241-14A, General Electric Company, Schenectady 5, N. Y.

* Names of utilities will be furnished upon request.

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GENERAL & ELECTRIC



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Gas turbines for peaking, combined steam-gas cycle, and base load



Mechanical drive steam turbines for boiler feed pumps and other auxiliaries

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"If we need that much oxygen, we need an on-site plant."

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ARE TALKING LINDE OXYGEN

"And LINDE has plenty of back up liquid oxygen capacity right in this area . . . 2,000 tons a day, I understand."

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UNION CARBIDE

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Imagine a turning circle that's eight feet smaller than other cab-over-engine trucks, eleven feet smaller than other tractor-trailers! A completely new concept in design gives the White Compact unmatched maneuverability and compactness.

Engineered to slash high costs of pickup and delivery in heavy traffic. Gets in and out of congested terminals and loading docks with ease. Nothing else like it for "peddle" runs, piggyback operations, shifting trailers in yards.

Both the truck and tractor models have extremely short wheelbases, sensational wheel cut of approximately fifty degrees, wide-track front axle, short bumper-to-back-of-cab dimensions, heavy front-axle loading, extremely low weight on drive axle, power-packed Super Mustang engines.

All are combined in the new White Compact models to carry more payload in relation to their over-all length, to make more money at every turn.

Torsion-bar tilt-cab. Picture-window visibility all around. Low cab-floor and step-height, and wide doors with

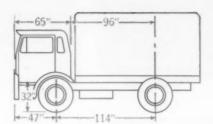


piano hinges, let driver step in and out of cab fast. Excellent riding and steering. "Corners" beautifully.

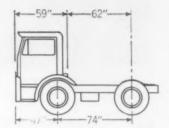
See the amazing new WHITE 1500 COMPACT series for yourself. Check all the unique ways it can give you a competitive edge in your business.

THE WHITE MOTOR COMPANY CLEVELAND 1, OHIO

Branches, distributors, dealers in all principal cities



Model 1500 Compact truck permits a two-foot longer body on any given wheelbase-128 cu. ft. more payload capacity!

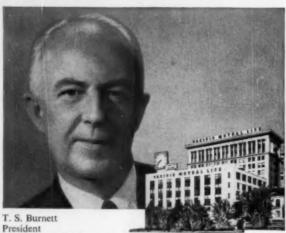


Model 1500T Compact tractor has 59" cab dimension, is ideal for handling trailers in all tight-squeeze situations.



These Pacific Coast Decision-Making

WESTINGHOUSE ELEVATOR "30-MINUTE

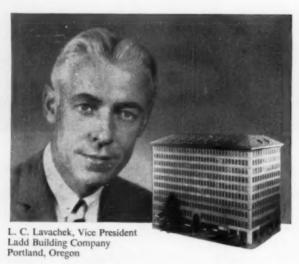


President
Pacific Mutual Life Insurance Co.
Los Angeles, California

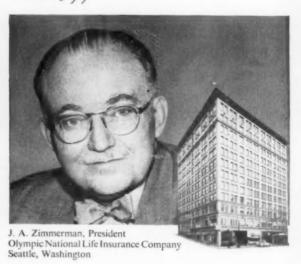
Our elevator problem was to move up to three thousand people per hour—quickly, pleasantly and dependably. Engineering studies and demonstrations decided us on nine Westinghouse Selectomatic units. They've proved exactly the right solution.



Traffic Control proved that safe operatorless elevatoring is here today. Once more, this 'Eye-Opener' demonstration showed me that there is, indeed, a big difference in elevator systems. Westinghouse leadership in electronic automation certainly sold me on this system for the California-Western States Life Insurance Company Building.



Before we modernized the Pacific Building, we looked at many types of automatic elevator installations. We decided on Westinghouse because we were most favorably impressed with its many fine features, particularly the manner in which the Westinghouse Selectomatic System handled traffic demands placed on elevators during the heavy up and down peak periods of the day. I was convinced of the tremendous amount of research and engineering that went into the design of Westinghouse operatorless elevators.



The Westinghouse 'Pre-Investment Eye-Opener' demonstration gave me an opportunity to see what makes an elevator system 'tick.' It pointed up the fact that there's much more to an elevator than the cab. Seeing the equipment as it went through its operational paces was dramatic evidence of Westinghouse quality in action. The demonstration convinced me that our decision favoring Westinghouse was a wise one for Olympic National.

Executives Experienced the

PRE-INVESTMENT EYE-OPENER"

WESTINGHOUSE DEMONSTRATION ANSWERS YOUR IMPORTANT QUESTIONS ABOUT BENEFITS OF MODERN OPERATORLESS ELEVATORS

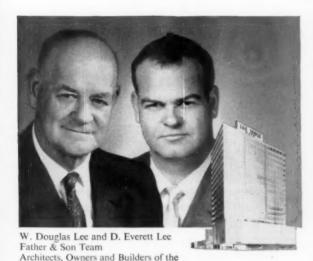
Westinghouse invites you to participate in a demonstration of the most advanced elevator system in the world. You must experience elevator performance to appreciate the remarkable results of Westinghouse engineering skills. Here are elevators that "think" for themselves *electronically* and *automatically*. They are as new as tomorrow—and more dependable than any elevator system previously devised. Tenants expect to find them in new buildings—and more and

more managements of existing buildings specify them at modernization time.

Selecting an elevator system is a key decision which deserves your personal attention and approval. As a building owner or manager, it pays you well to investigate before you invest. Make arrangements to see this behind-the-scenes demonstration by calling the Westinghouse Elevator Division Sales Office in your city. You can be sure...if it's Westinghouse.

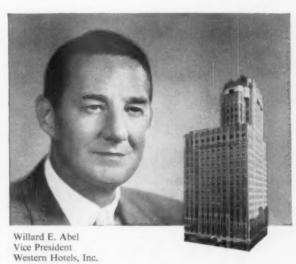


ELEVATORS AND ELECTRIC STAIRWAYS



We, as architects, know the merit of good vertical transportation relative to the population demands of a structure of this nature. The Westinghouse 30-minute demonstration crystallized our research study for Lee Tower. We are convinced that Westinghouse Selectomatic Automatic Elevators will deliver the maximum performance with minimum maintenance.

22-story Lee Tower Los Angeles, California



Three important questions had to be answered before we selected a modernized elevator system for the Sir Francis Drake Hotel in San Francisco . . . Would the elevators start and stop with the greatest smoothness and comfort? —Were operatorless elevators going to be faster and more efficient?—Would they automatically take care of changing traffic demands in our hotel? The 'Eye-Opener' demonstration provided the answer to all three questions, a decided yes. Westinghouse was our clear choice. ? ?



Now the directions are on our package

The "package" for your move is the van... the container that protects your valuable goods as they travel. Our new symbol is starting to appear on thousands of vans... and the four arrows suggest the world wide scope of our service. North American agents can carefully and efficiently handle your move across town... to any place in our 50 states... or to any of 65 countries overseas. When you see this symbol, be reminded of this vast network of experienced businessmen, carefully trained operators with the finest equipment. Whether you are moving your own family, or arranging for the moving of other families for your company, the Gentlemen of North American are ready to serve you where you start... waiting to serve you at your destination.



You'll see more about these services on "Championship Bridge with Charles Goren" (ABC-TV), sponsored by North American Van Lines, World Headquarters, Fort Wayne, Indiana.

NORTH AMERICAN VAN LINES



for largest state office building in America

Indiana State Office Building
...installation by Indianapolis Office Furniture Company



• Key considerations in selecting seating for this new Hoosier state building were employee comfort and efficiency, plus maintenance-free performance and styling to harmonize with interior design. Testing and evaluation by state officials began over a year ago.

When competitive bids were opened and it was found that Cosco would also save Indiana taxpayers' dollars, the choice became easy. For *you*, too, Cosco seating will give *greater value!* Phone your nearby Cosco dealer listed in the yellow pages for free demonstration, or write direct for complete catalog.

HAMILTON COSCO, INC., Dept. BW-116, COLUMBUS, INDIANA





utstandability



Industry profits from modern, tailored transportation along the Chessie Route

Regardless of the type of business or freight, Chessie meets every need of shippers. C&O's large and varied fleet of special-purpose cars provides custom service from the raw material stage to the finished product. Better protection, quicker loading and unloading and greater volume per car are only a few of the advantages.

CLIC (Car Location Information Center) reports with speed and accuracy on the scheduled movement of your products...allows quick diversion for strategic marketing, if

desired. The gentle handling of push-button classification protects fragile merchandise.

For export-import commerce Chessie has extensive facilities at Newport News, Va., on Hampton Roads. On Lake Michigan, the C&O Trainferry Route provides a shortcut between the East and Northwest.

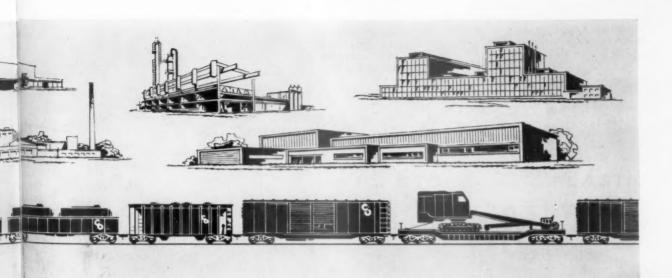
These and many more up-to-the-minute transportation advantages are yours in Chessieland. Your resourceful C&O traffic man can put them to work for you.



Chesapeake and Ohio Railway

TERMINAL TOWER, CLEVELAND 1, OHIO

Outstandability in Transportation





WILL IT IMPROVE PER-FORMANCE AT NO MORE COST?

The re-design and custom-molding of this postal scale in high-impact plastics improved appearance and gained customer acceptance that was immediately reflected in increased sales.

DECIDING TO SWITCH TO MOIDED Plastics



This refrigerator control panel of custom-molded plastics lowered the cost of an intricate part by reducing assembly and finishing time while maintaining quality and performance. "Without exception, the adoption of plastic parts over previously used materials is decided only if it makes possible a 1 reduction in price, with the same quality; or 2 an improvement in quality, with the price remaining constant; or 3 a reduction in price and an improvement in quality at the same time."*

Plastics are measuring up to these demands—in the skillful hands of the custom molder. Well-known as a mass producer of molded parts and products, the custom molder is much more. He knows the design limits of the many plastics. He can recommend the best formulation for the job. He can engineer the design to capitalize on the inherent advantages of plastics materials and the efficiencies of plastics manufacturing. He builds the master molds to fine tolerances. He turns out plastics parts with unusually consistent quality, at rates to meet the tightest schedules and budgets.

Monsanto, as a leading plastics materials supplier, keeps the custom molder supplied with molding formulations of Monsanto Polyethylene, Lustrex® Styrene, and Opalon® Vinyl, specially developed and constantly perfected to meet the widening range of design requirements. Monsanto has also prepared a special report that can help you decide how custom-molded plastics can work best for you. For your free copy, mail the coupon. As reported by a leading newspaper. Reprints on request.



MONSANTO ACTIVATOR IN PLASTICS

MONSANTO CHEMICAL COMPANY
Plastics Division—Room 790
Springfield 2, Massachusetts
Please send me a free copy of "How To Buy Custom Molded Plastics."
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... foundation for corporate expansion

... foundation for corporate expansion

Fifteen years of steady industrial growth, unbroken by three national recessions, form a solid foundation for the opportunities which exist in Florida today. And the rate of growth is continuing in a steady upward curve.

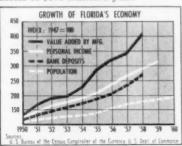
A total of 699 manufacturers chose Florida locations for new plants in 1959. Eighty-four manufacturers announced expansions which will add some 10,000 workers to their payrolls.

A recent comprehensive state-wide study by Arthur D. Little, Inc., estimates that manufacturing employment will reach 400,000 by 1970—approximately two times the present figure.

Significant changes have taken place in the state's economy in recent years. Industry is setting the pace as it begins to realize its full potential.

In 1947, cash farm income roughly equaled value added by manufacture in all of the state's industries. But although farm income rose to \$700 million in 1958, it was far outstripped by manufacturing which increased to \$1.422 million in value added.

Tourism has increased in the last ten years, but manufacturing payrolls have quadrupled and are now estimated in excess of \$800 million a year.



Measured by any yardstick, Florida's development has been swift and steady. Since the end of World War II, industry, financial resources and markets have all increased more rapidly than population.

SOUND DIVERSIFICATION

Just as important as the growth of manufacturing is its diversification.

Ten years ago, food processing, lumber and wood products, and the pulp and paper industries accounted for over half of all manufacturing employment in Florida. Today, even though these industries have shown growth, employ-

Dramatic changes in the skylines of Florida cities mark business and commercial expansion to match the state's swift industrial rise. Shown here: Recently completed multi-million-dollar Atlantic Coast Line Railroad building in Jacksonville. More than a thousand employees were added to local payrolls when the railroad moved its headquarters to Florida this summer.

ment in them accounts for only about a third of the total for the state.

Employment in chemical manufacturing has increased 203 per cent since 1949 to a total of more than 15,000. Stone-clay-glass employment is up 248 per cent; fabricated metals, 370 per cent. In 1949, only a few hundred persons were employed in the manufacture of electrical machinery. Today, the figure is almost 9,000.

SMALL FIRMS HAVE GROWN LARGE

TAMPA ARMATURE WORKS, INC., began as a three-man electrical repair shop for the phosphate mining industry; is one of the nation's largest independent electrical repair plants. Volume, \$1.8 million in 1950. is \$6 million today.

ADAMS ENGINEERING COMPANY, INC., Miami, was founded in 1949 to manufacture jalousie windows. Sales were \$300,000. This year, sales will exceed \$12 million. Adams Engineering operates one of the most completely integrated aluminum fabricating businesses in the Southeast, sells nation-wide.



Among the national manufacturers which have found ideal locations in Florida's smaller cities is Roehr Products Company, Inc., DeLand, maker of disposable hypodermic needles and syringes. Originating as a Connecticut corporation, Roehr opened this second facility in Florida in 1954 with a handful of workers. The DeLand plant now employs approximately 500.

LARGE FIRMS ARE EXPANDING

UNITED STATES GYPSUM COMPANY opened its first Jacksonville plant in 1939 with one calcining kettle and one gypsum board machine. As the building industry has grown in Florida and neighboring states, facilities have been steadily expanded. Except for the war years and 1948 and 1949, some major improvement has taken place at U. S. Gypsum every year.

Buckeye Cellulose Corporation, a subsidiary of Proctor & Gamble, opened its original plant in Foley in 1954. In 1959, a \$20 million expansion brought annual capacity to 200,000 tons of pulps for use by makers of cellophane, plastics and rayon. Last spring, another major expansion was announced. Buckeye now employs approximately 700 persons.

WHAT INDUSTRY FINDS IN FLORIDA

Besides an equable climate and water resources that are unexcelled anywhere in the nation, industry has found many other advantages in a Florida location.

Estimates indicate a saving of as much as 18 per cent in building costs, and a similar economy in year-round maintenance and operating expenses.

In terms of retail sales, Florida ranks as the tenth largest market in the nation; and in rate of growth, it ranks first among the major states.

Manpower is ample. People like to live and work in the Sunshine State, and many major companies have found it relatively easy to recruit skilled technicians and engineers from out of the state when their needs cannot be filled from Florida sources.



Martin-Orlando's original Florida facility was a half-million-square-foot plant opened in 1957. Expansions in 1958, 1959 and 1960 have brought the total to 963,000 square feet. Most recent expansion is the 80,000-square-foot Pershing Missile Project Building completed last summer. It will accommodate 1,200 technicians and office workers. Today, Martin employs over 8,300.

SEND FOR THE BOOKLET "GUIDE FOR LOCATING YOUR PLANT IN FLORIDA"

This new 16-page booklet explains in detail how the Industrial Services Division of the Florida Development Commission can help you select the most suitable location in the state.

It describes special studies which can be prepared for potential locations covering markets, manpower, transportation and supplier industries as related to your individual needs.

Meetings with community leaders may be arranged, but unless authorized, your identity will not be revealed.

Write to B. R. Fuller, Jr., Exec. Dir., Florida Development Commission, 4003-4 Carlton Building, Tallahassee.

For more general information about industrial Florida, ask for the nine-part file folder, "Profile of Progress."

See industrial Florida for yourself. Write State of Florida, Dept. B, Carlton Building, Tallahassee, for a 100-page color "Vacation Guide."



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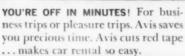
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THE QUALITY OF

The mind of Galileo-keenly analytical. superbly trained—led him to founding the science of experimental physics, which, centuries later, is revealing the mysteries of space. It is self-evident by his achievements that Galileo's mind reached a level of quality far above ordinary standards of excellence.

> Within the same area of meaning. the quality of minds responsible for an engineering project can be evaluated only by results. When you check the record of Brown & Root's engineering through the years, the high quality of thinking reveals itself. Customer satisfaction from greater efficiency at lower costs has built a worldwide reputation for engineering and construction by Brown & Root.

"The knowledge of a single fact through a discovery of its causes prepares the mind to understand and ascertain other facts ... '

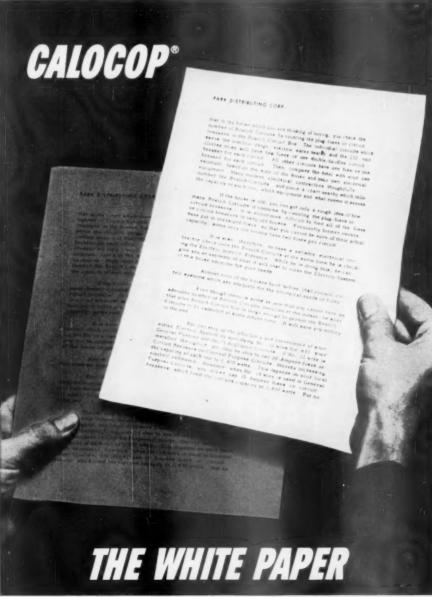
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The photograph above shows a ceiling section of a factory in Pennsylvania after a flash fire. A new kind of paper lamination was used as a moisture-vapor barrier under the roof. This paper is self-extinguishing when its combustion temperature is reached. The intense heat burned away one of the layers in the lamination allowing this self-extinguishing feature to work . . . thereby helping to contain an otherwise potentially destructive fire.

This flame resisting material carries a minimum Underwriters' Laboratories Flame Spread rating. Called Pyro-Kure®, it is typical of Sisalkraft's superiority in combining paper, foil and/or plastic. Some of our products go into the making of flexible packaging, carton tapes and construction papers. If this experience suggests a possible answer to a problem in your firm, we will be glad to hear from you. Write to our main offices in Attleboro, Massachusetts.



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reinforced paper, foil and plastics for construction, industrial packaging and agriculture



Facts behind the headlines - How Vick outgrew its name

In 1937, Vick marketed three colds products under the Vicks trademark. Today, as the result of a continuing diversification program, the company has eleven operating divisions in all four major segments of the drug industry-ethical drugs prescribed by doctors, veterinary drugs for animal health, proprietary drugs advertised to the public, and chemicals used in drugs and other industries. All four segments have shown continued growth. Ethical and veterinary sales

have grown fastest, moving up from 29% of sales five years ago to 43% today, larger than total company sales only eight years ago. Obviously, the Vick name, so familiar in proprietary drugs, has been outgrown as the corporate name. In the future, it will be used as fully as ever on proprietary products but the overall company becomes Richardson-Merrell Inc., combining names used in the drug industry for 75 and 132 years respectively.

Growth in good times and bad

With its broad-based diversification in the recession resistant drug industry, the company has grown steadily in both sales and earnings, even in the depression years of the 30's. During the last five years, net earnings have increased at an average annual rate of 17%, and per share earnings at an average rate of 13% a year. Sales for the fiscal year ended last June 30 were \$132 million, up 14.8% from last year. Net earnings were up 18.3% to \$14.4 million, and per share earnings up 18.8% to \$3.22. Both sales and earnings have continued to rise in the first quarter of this fiscal year.



Foundations for future growth

These are the factors in growth, past and

- 1. Broad drug diversification, permitting growth in all areas without being unduly dependent on any one.
- 2. Acquisition of companies, continuing a program started in the 30's, with five companies acquired in the last two years.
- 3. Ample capital to finance expansion and acquisition of companies, with uninterrupted dividends since 1925.
- 4. Research and development, with research expenditures tripled in the last five years to \$4.8 million.
- 5. International expansion through greater sales of products marketed in 117 countries, development of new products, acquisitions.
- 6. People for growth-experienced management for an expanding enterprise through decentralization and executive development.

COMPANY'S GROWTH AND DIVERSIFICATION IN ALL DRUG AREAS 1937 1960

SALES \$132 3 MILLION



1959 - 60

For a copy of the annual report, please write to: Dep't A. Richardson-Merrell Inc., 122 E. 42nd Street, New York 17, New York

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Cellophane is unmatched for trouble-free packaging machine performance. It feeds and forms perfectly because it's rigid and static-free. It heat seals securely over a wide temperature range. Equally as important, cellophane's pure transparency and sparkle create maximum sales appeal. And various

types of Avisco cellophane give proper protection to a wide variety of products. Regardless of your product, count on Avisco cellophane, plain or printed, for total packaging economy. Phone or write for an appointment with our representative or a selected cellophane converter.

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BUSINESS OUTLOOK

BUSINESS WEEK NOV. 19, 1960



Rarely has business shown so little change for so long. Another mite of ground seems to have been surrendered ever so grudgingly in October, and there are signs of a little more slippage in November.

Even so, retail sales snapped back enough last month to justify hopes of a holiday record—even though the margin over 1959 may be thin.

October's upturn in retail volume put it ahead of the same month last year—and the year-ago month set a record that stood till April of this year. The upturn was all the more welcome because it followed on the heels of a distinctly disappointing third quarter.

This may mean that consumers are spending again (though doubters probably will argue that it was just a catch-up after the earlier lag).

Dollar volume for all types of retail establishments last month neared \$18½-billion (seasonally adjusted), according to the flash report just compiled by the Dept. of Commerce from preliminary reports.

At that rate, last month was substantially better than any of the preceding three. In fact, it was about on a par with May and June.

Sales of durable goods moved up smartly in October just as had been the case a year ago.

The unusual bulge in both years seems to have reflected exceptional interest in new-model autos. However, though units sales of new cars apparently topped a year ago, volume for all automotive products trailed 1959.

The fact is that these establishments (handling used cars, trucks, and parts as well as new cars) have been behind for six months.

Sales of appliances and other household goods helped 1959's October to its very high figure for hardgoods volume. They showed nothing like as much improvement for the same month this year.

In fact, failure of retail volume in automotive goods and appliances to keep up with a year ago is retailing's main trouble spot.

And the news now isn't reassuring. Despite the talk of good auto sales, many small cuts have been made in output (while Chrysler has just scheduled a second rather major adjustment). And Avco is cutting off appliance output at its Nashville plant for several weeks.

Sales of softgoods threatened no records in October. They topped the disappointing September level, to be sure, but the gain barely carried them back to the average rate for May through August.

And April's Easter peak still stands as a towering landmark.

Employment figures aren't offering very robust support for a sustained rise in earnings and retail sales.

In fact, the October report made about the poorest reading of 1960 to date. Employment sagged in a month that normally would be expected to show a good gain. And unemployment, seasonally adjusted, rose to 6.4% of the labor force (the highest ratio since the end of 1958).

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK NOV. 19, 1960 It should be noted, though, that farm employment was unseasonably high in September; its dip of 340,000 in October may have been mostly a matter of harvesting having run ahead of schedule.

Nonfarm employment rose by about 60,000 last month, but this was substantially less than the normal seasonal gain.

The fault here was mainly a further decline in **manufacturing employment**. Factory jobs now total about 350,000 less than at the high last February (on either the raw figures or seasonally adjusted).

Employment in the auto factories rose a bit more in October, but declines marked most of the other big-employment industries.

One favorable aspect of factory employment last month was a moderate rise in the average work-week and higher weekly payrolls.

Longer work-weeks and higher average earnings, though, were not an across-the-board thing. The best gains were in autos and the associated rubber industry, in the stone-clay-glass category, and in textile mills (surprisingly enough). Improvement was scanty in other major lines.

Here's a sidelight on factory employment (a little esoteric, perhaps, but significant nevertheless):

Plants are beginning to cut force among nonproduction workers in their efforts to reduce costs. This is a development that always lags a good bit behind any dip in business; factories lay off production workers promptly, but they hang onto sales, clerical and supervisory hands who may be especially hard to replace when business picks up.

Weekly production figures would indicate that employment has declined a bit in the auto industry (or hours have shortened, or both).

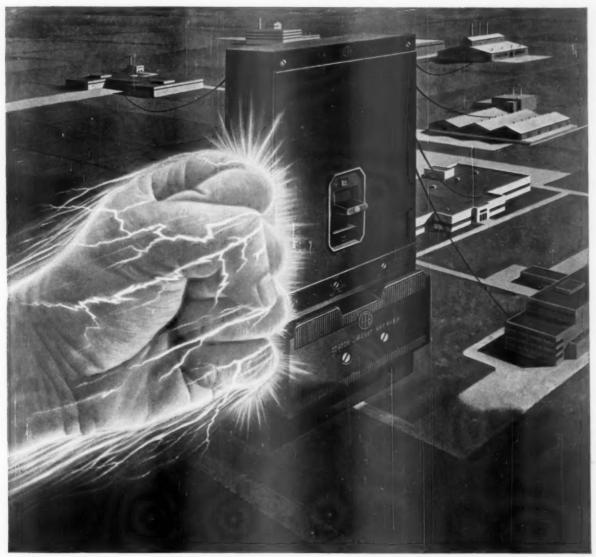
Chevrolet and American Motors are among the few that haven't cut back at all from their early peaks on the new-model run. Aside from Rambler, Corvair is about the only one of the compacts (except the new ones, only now really getting into production) that is holding up, and Corvair hasn't yet come up to its best early-1961 output.

Valiant not only is way below its average rate on most of its 1960 model run but is trailing Dart and the new Lancer.

Careful adjustment of auto output, week-by-week and make-by-make, apparently represents a careful effort on the part of the makers to keep dealers' stocks from getting out of hand. Field stocks of nearly a million U.S.-built cars so early in the season call for close control.

Declining business outlays on new plant and equipment may be less of a drag on over-all activity than most people have been expecting.

This will be particularly true over the near future—the months for which spending plans are pretty firm. And for all of next year (unless declining business sours present intentions), the McGraw-Hill survey shows projected expenditures declining only 3% from the 1960 total (page 46).



A smooth path for normal electric currents, the I-T-E Cordon circuit breaker becomes an impassable barrier to heavy, smashing slugs of power. Here, artist Ned Seidler paints the Cordon in its vital protective role.

TAMES THE TERRIBLE POWER OF ELECTRICITY

Behind nearly every electric circuit in factory, school and store lurks considerably more power than is used. Big power demands a circuit breaker with big protection built into it. Otherwise a simple short circuit could cause spectacular fireworks and damage. Against this risk, I-T-E developed its "Cordon®" circuit breaker... capable of interrupting up to 100,000 amperes in only 1/240 second. If accidental short circuit opens the gates to a damaging flood of electric current, the "Cordon" quickly shuts them... faster than an eye can blink. Yet the "Cordon" fits into only half the space required by traditional devices. And it costs a third less. This new and advanced solution to an

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This work center covers an area of 93.2 square feet. A grouping which suggests costly custom designing, it is nevertheless achieved easily from a standard inventory of Invincible Modernettes. These modular units have remarkable flexibility, beauty, and the serviceability of highest quality steel.

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BUSINESS WEEK

NOVEMBER 19, 1960 NUMBER 1629

Kennedy Gets Into Action Fast

President-elect John F. Kennedy, who campaigned on the need for a strong President, was finding out this week what that meant. He tried to take a "vacation" in Florida, but found that only he could make decisions.

Top aides in Washington shuffled papers and took a few days' breather while they awaited decisions that would determine how they should move next. A priority item, for instance, was getting people to work on the budget and the legislative program. But until a budget director was appointed, there was not much that other staff members could do.

• Quick Moves—For three days at the family estate at Hyannis Port, Mass., Kennedy had squeezed in some rest with his family, a few games of touch foot-

ball on the windy beach.

At his first post-election news conference he announced eight appointments. He picked four top White House aides from his campaign staff—Theodore C. Sorensen as special counsel; Pierre Salinger as White House press chief, and Andrew T. Hatcher, a Negro assistant labor commissioner in California, as associate press chief; and Kenneth O'Donnell as special assistant for political relations.

Kennedy also said that he will keep Allen W. Dulles at the Central Intelligence Agency and J. Edgar Hoover as FBI chief. He picked James M. Landis to draw up recommendations for streamlining the regulatory agencies, and anounced that Clark M. Clifford, former Truman counsel, would work with Pres. Eisenhower's men in smoothing the

takeover.

Dispersal—Then he boarded his personal twin-engine Convair for a 10-day stay at his father's Palm Beach home.
 At National Airport in Washington he dropped off his wife, who went to their Georgetown home to await the birth of their second child.

His brother Robert F. Kennedy, a constant right hand throughout the campaign, flew off to Acapulco with his

wife for a week's rest.

Sorensen drove back to Washington for a few days seclusion.

Salinger, after a brief stay at Palm Beach, took off for a holiday in Jamaica. Research and liaison chief Myer Feld-



EYES ON KENNEDY-Senator finds that even a President-elect can have few idle moments, as aides and party leaders look to him for decisions setting their line of action.



VICTORY CELEBRATION brings Kennedy and members of family together at Hyannis Port, Mass., before his departure for working vacation in Florida.



PLANNING for takeover of reins of government proceeds in Washington, with Clark M. Clifford, former Truman aide (left), representing Kennedy in working out transition with Wilton B. Persons, chief Eisenhower assistant.

man went to California on personal business.

• Ready to Act—The 43-year-old President-elect for the first time was hit with the essential loneliness that would be his lot as the only man who could make decisions as head of a great nation. Even the newsmen traveling with him, who had been calling him "Jack" right up to Election Day, now addressed him respectfully as "Mr. President."

Kennedy is taking power on the basis of the narrowest possible victory. In popular vote terms, he could not be considered as having a mandate from the people for broad sweeping changes. But he talked this week with the assurance of a man who is soon to be President—and as if it did not matter whether he won by one vote or I-million. He had spelled out his program very clearly in weeks of campaigning, he said, and the people had elected him instead of Richard Nixon.

He is dedicated to the idea of strong, vigorous leadership and he knows from service in both House of Representatives and Senate that the legislature cannot provide leadership. But he also knows that a new President has only a few weeks of grace before the entrenched powers in Congress close in to lock horns.

He is determined to use his initial momentum—the first 90 days—to the fullest possible advantage.

 Nixon Meeting—The preliminary work of turning over the mammoth organization of government can be handled by others back in Washington. But Kennedy alone can name the people who will lead the new Administration. And for this purpose a stream of callers began to arrive at Palm Beach.

Take the Kennedy week in sequence: Before Kennedy saw any of his own supporters, on Saturday evening he telephoned Vice-Pres. Richard M. Nixon, who was dining at the Jamaica Inn near his beach villa at Key Biscayne when the call came through. Nixon returned the call from a telephone booth, and Kennedy flew down Monday morning for a chat.

What they discussed neither would disclose. But newsmen ascertained that they talked about a top appointment for one or two Republicans, possibly in some foreign affairs role such as ambassador to NATO or to the Organization of American States. It was the first time in history a winning Presidential candidate had hopped over the net so promptly to shake hands with the loser.

• Pro and Con—The move drew both applause and criticism.

Some see it as the gesture of a big man moving to heal the wounds of the campaign as a prelude to creating a national, bipartisan government. Others see it as a bid for Republican support from a man who just squeaked into the Presidency, and the first watering-down of the campaign's "high hopes." Kennedy himself said he hopes to meet with Nixon again early in December.

· Foreign Priority-It is clear that for-

cign affairs are uppermost in Kennedy's mind. In addition to his talk with Nixon, he is studying a new, lengthy report from Adlai É. Stevenson on trouble spots overseas that might require attention early in his Administration. Item No. I: Berlin. Soviet Premier Khrushchev has talked of forcing a settlement on the Berlin question by spring.

Allen Dulles was to come to Palm Beach later this week, presumably to fill Kennedy in on the latest secret reports from abroad. The President-elect, who had sharply criticized Eisenhower's "neglect" of Latin America, also announced plans to meet sometime soon with another president-elect, Janio Quadros of Brazil.

• Cabinet Maneuvers—Closely tied in with foreign affairs are decisions to be made in defense policy. Sen. Stuart Symington, who for several months has headed a study group on Pentagon reorganization, happened to be vacationing at Key Biscayne. Kennedy scheduled a conference with him for this weekend. Symington has been touted as a possibility for Secretary of Defense, but he has told friends that he would rather stay in the Senate, and feels he could actually be more help to Kennedy there than at the Pentagon.

A paper on defense and security matters prepared by Paul H. Nitze, a State Dept. official under Pres. Truman, is getting some study, too.

Another prospective Cabinet member, Gov. Abraham A. Ribicoff of Con-



OVERTURE to defeated rival brings Kennedy to Key Biscayne, near Miami, for meeting with Vice-Pres. Nixon. They talked about possible high posts for Republicans in foreign affairs role.



APPOINTMENTS to Cabinet and other top Administration jobs occupy Kennedy, bring visitors to Palm Beach—among them Gov. Ribicoff of Connecticut, mentioned for post of Attorney General.

necticut, came for luncheon on Tuesday. Ribicoff is prominently mentioned for Attorney General.

How many others were in contact with the President-elect could only be guessed. Sen. Wayne Morse, a member of the U. S. delegation to the U. N., disclosed that he had talked by telephone to Kennedy and looked for the President-elect to visit the U. S. delegation soon after leaving Palm Beach.

Kennedy was also on the phone with his brother Robert, and with aides in Washington, and kept a staff of secretaries busily occupied.

• Preparing for Congress—At midweek, Kennedy left Florida for Texas. His purpose: to discuss problems of how to push his liberal legislative program through Congress with Vice-President-elect Lyndon B. Johnson at the LBJ ranch near San Marcus, Texas.

Johnson on his own, is already talking to the press about a "purge" of the House Rules Committee, which blocked several important pieces of Democratic legislation this year (page 44). Appointments, too, were high on the agenda for the confab with Johnson.

Washington Confab—In Washington, meanwhile, Clark Clifford is laying the groundwork for the Democratic takeover of the reins of government, once Kennedy has named his men. Shortly after the Los Angeles convention, Kennedy had asked Clifford to work out a White House organization plan that would produce a flexible staff, and keep Kennedy free for the big de-

cisions without isolating him from the controversies involved.

During the week, Clifford met at the White House for two hours with Maj. Gen. Wilton B. Persons, the assistant to the President, and found him helpful in pointing out organizational problems and qualifications for various staff jobs.

Clifford also has the assistance of a team of experts at the Brookings Institution who have been working on ways to make White House operations, and the transition of power, run more smoothly whoever won the election (BW–Nov.12'60,p161). Clifford is drawing up a roster of 200 top jobs that will have to be filled for an effective turnover of the policymaking machinery of government, and another 400 Kennedy can fill with political appointees.

• Landis' Job—A deadline of Dec. 15 has been set on Landis' report on revamping of the regulatory agencies. Landis, an old friend and adviser of the Kennedy family, has been preoccupied with a convention in Miami of the Air Line Pilots Assn. as a candidate for president of the organization. But he needs no surveys to figure out what he will recommend to Kennedy.

As a former member of the Federal Trade Commission, chairman of the Securities & Exchange Commission, and of the Civil Aeronautics Board, and dean of Harvard Law School, he has been a long-time critic of the regulatory agencies. Landis is planning to meet with a number of agency chiefs, then make recommendations in stages.

He will probably limit himself at first to recommendations for speeding up regulatory decisions and reversing what he considers a downward drift in the caliber of men appointed.

Landis does not favor abolishing the agencies or separating judicial from administrative functions, but he does see a number of needed reforms.

• Office Problems—At national party headquarters, littered desks with nobody behind them testify to the haste with which the staff fled for a few days vacation—or to wait hopefully for job offers. Lawrence F. O'Brien, a top campaign aide who will probably get a White House post, is busy with a few assistants wrapping up the campaign, and compiling a card file of people helpful in it—a file that will be indispensable in passing out patronage.

New working headquarters for the people who will be getting ready to take office with the President on Jan. 20 will have to be found. Brookings Institution reportedly has offered space in its new headquarters building, and there is talk that Eisenhower may offer Kennedy Blair House, across Pennsylvania Avenue from the White House, for his working quarters.

• Not All Work-Kennedy's Palm Beach stay—it will be 10 days in all—is not all work. With him are his roommates from Harvard (Rep. Torbert H. Macdonald, D-Mass.) and prep school days. He swims daily, fishes a bit, plays golf at the Palm Beach Country Club with visitors—Gov. Ribicoff, for one.

"I voted for Nixon, but I'm not losing any sleep over Kennedy's victory . . . I feel about as disappointed as I would if my alma mater lost a football game . . ."

- Department store president.

"Emotionally, I'm terribly depressed. But as far as business goes I don't think it makes a damn bit of difference . . ." - Pres. W. Linton Nelson of Delaware Fund, Inc.

"We shrugged off the result. After all, who does inflation benefit? It helps the man who owns real property and who owes money. Can you think of anyone or anything in the economy who fits that description better than the steel industry?" - Comptroller of a steel company.

"Kennedy's election will mean more business for us and for our industry . . . but I fear it will be a profitless prosperity for us."

- Chmn. Robert E. Gross of Lockheed Aircraft Corp.

"We're sitting back and waiting. I think most businessmen will stay cautious until next spring when we get a chance to see how Kennedy will act. — Pres. Francis Trecker of Kearney & Trecker Corp.

"If Kennedy carries out all the promises he has made, God help us . . ." - A Milwaukee manufacturer.

Businessmen Find Kennedy

The nation's businessmen have had a week to brood over the result of the Presidential election: now they're ready to talk thoughtfully about what they think Sen. John F. Kennedy's victory means to them. And consensus seems to be: "Sure I voted for Nixon. But I don't believe Kennedy's Administration can bring us any real harm." In some cases there's a surprising note of cheerfulness to the second half of that

It's a widespread consensus among businessmen in big companies and small ones, in top jobs and jobs lower down the line, in the East, the West, the Midwest, and the South-to whom BUSINESS WEEK'S reporters talked this week

· Little Alarm-Only a small handful of these businessmen voted the Democratic ticket for the Presidency. Yet only as small a number view the result of the election with any emotion approaching alarm or disgust. And some see, in the short run at least, a positive boon to business with the election of Kennedy.

From their answers to BUSINESS WEEK's questions, you get the feeling that a substantial number-though far from a majority-of these businessmen might well have voted for Kennedy if they had been influenced only by their pocketbooks, and that other issues-the fear of stronger labor influence in Washington, the fear of longrun inflation, and probably habit and tradition, too-prompted them to vote for Nixon.

• Unhappy Texans-Almost the only center where there's real chagrin over Kennedy's election is in Texas. There. almost every businessman is at least in part an oilman or depends heavily on oilmen. And Kennedy in his campaign failed to say whether he backed continuation of the oil depletion tax allowance. One Houston businessman now talks darkly of "an affinity between [Walter] Reuther's socialistic training which he got in Moscow and Kennedy's socialistic training which he got in the London School of Economics.

Elsewhere, the result doesn't make Republican businessmen happy, but they are not despondent. Even in so old and staunch a center of Republicanism as Cleveland's business community there's a quiet tone of hopefulness. Typical of it is the reaction of Chmn. Dwight P. Jovce of Glidden Co. He says: "I'm concerned about a renewal of inflation-but I was concerned about this in regard to Nixon, too . . . I don't feel Kennedy will be particularly influenced by labor; I think his mandate is so uncertain he won't be influenced unduly by any group. We're certainly not throwing in any sponges or pushing any panic buttons. After all, we survived 20 years of Roosevelt and Truman; in fact there are some who say we survived eight years of Eisenhower. So I imagine we'll survive Jack Kennedy."

· Labor's Influence-Just about all the businessmen Business WEEK talked to assume that labor will have a greater influence in Washington than it has

had in the last eight years. But how much is a question on which there's little agreement. Some believe that the narrowness of the popular vote for Kennedy will keep him from allowing labor too strong a voice; others feel that Kennedy's strong support from the cities will force him to give labor a quid pro quo for its support.

"The unions," says a Midwestern steelman, "will be pushing very hard indeed in their bargaining for improved programs for the aged. Quite a few men beyond the age of 65 are hanging on in plants covered by union contracts and quite a few young men can't get steady work because the old men are still at their jobs. I think the unions will be all-out to do what they canwhether at public expense or company expense-to make it easier for the old men to step down. Programs for better pensions, fully paid medical care, and so on will be at the heart of union demands in the next few years."

· Inflation Expected-There's more of a clear consensus on businessmen's estimates of the scope of inflation that may follow the election. They believe that the narrow margin of Kennedy's victory and the continuingly conservative Congress will keep things in check.

'Kennedy isn't apt to run wild with spending programs," says a Midwest manufacturer, "and Congress won't allow him to if he does attempt it."

"I think Kennedy is a lot more sensible than some people have made him out to be," says a Boston manufacturer (a Republican). "But if it does "I'm not greatly apprehensive about the influence of labor, because Congress is going to be in the hands of much the same people who have run it for the last eight years."

— Chemical Company Executive

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"I expect there'll be more inflation under Kennedy than we would have had under Nixon. A little inflation is a pleasant thing, but unless you get the whole world to inflate with you, you're just defeating yourself."

- Pres. Arthur Sinkler of Hamilton Watch Co.

"Short-term, business will get a shot in the arm from Kennedy. But, long-term, I'm afraid this will mean more of the inflation that took us so long to get under control."

— A Pittsburgh manufacturer.

"I'm not worried about labor's influence, or inflation, or cheap money . . . I feel the coalition of Southern Democrats and Northern Republicans will keep Kennedy from doing anything idiotic."

- Chairman of a California utility company.

Victory Easy to Take

come to heavy spending Congress will hold him down."

"If Kennedy doesn't tone down his program, Congress will do it for him." says a Midwest machinery maker.

But despite this widespread confidence in the calming hand of Congress. most of the businessmen to whom BUSINESS WEEK'S reporters talked foresee inflation. They foresaw it, they say, no matter who was elected President. "Except for depression periods," says a California department store president. "I can't remember any time in my life when we weren't in an inflationary lift of some kind." Pres. W. Linton Nelson of Delaware Fund, Inc., a Philadelphia mutual fund group, says: "It's certainly likely there will be inflation, but I see it coming from prevailing economic forces, not from the influence of the man in the White House

The steel company controller whose sanguine comments on inflation are quoted above adds: "I don't think anybody in the steel business really wants more inflation. But I don't think anybody in the industry is going to cut his throat or conclude that the U.S. economy is hopelessly gone simply because a man has been elected on a platform that certainly sounds inflationary. The point is, though, that you and I will suffer more as individuals than our companies will if we do get a return to inflation."

• Effect on Business Decisions—Even though most businessmen seem to expect a new round of inflation, only one admits to having based a major business decision on the result of the election. The financial vice-president of a large Cleveland mining and manufacturing company says that his management, partially in the belief that inflation would start spiraling again, has decided to accelerate its plans for a plant expansion—thus getting more plant for its dollar today than it might next year.

Almost all the others, among the scores of businessmen BUSINESS WEEK talked to this week, say Kennedy's election has had no direct effect on their companies so far and that there's not likely to be any such effect until they see what happens in the first months of Kennedy's Administration.

The great guessing game of the moment among businessmen, as among many others, is picking the new Administration's Cabinet. Many businessmen have already set some criteria. They approve the reported choice of Gov. Luther H. Hodges of North Carolina as Commerce Secretary. A few say they would like to see Chmn. Henry C. Alexander of Morgan Guaranty Trust Co. of New York appointed Treasury Secretary, and that it would be disastrous to have Profs. J. K. Galbraith and Arthur M. Schlesinger, Jr., two of Kennedy's chief advisers, in the Cabinet.

• Spring Pickup Forescen—Not many businessmen, though, appear to be guessing about the moves the new Administration might make to counter the current slide in business. The reason is that most of them don't believe Kennedy will need to make any moves.

Almost all of them say they expect the recession will have worked itself out by the middle of 1961 and that the first signs of an upturn will come in the spring, just about the time the new Administration is getting itself into gear,

"If the government steps out with a big spending program to counter the recession it will be late next year before it has any effect," says a Pittsburgh manufacturer. "And by then, it will collide with a natural business recovery. It will do no good at the time it might have been needed, and it will add an unnecessary inflationary spurt at a time when extra inflation isn't needed."

• Foreign Policy—The whole issue of experience seems to bother businessmen only when it comes to foreign policy. And not many of them are bothered even in that field.

One Boston banker, with true New England prudence, says: "I wasn't afraid of one of the candidates winning over the other as much as I am fearful of the new generation, which is likely to do things they aren't able to undo."

But among otherwise staunch Republicans, you frequently hear comments like this one by the vice-president of a chemical manufacturing company: "Eissenhower didn't produce any solutions in the cold war in the last eight years, and I can't say I was enchanted with Nixon's ideas on foreign policy. Maybe there are no easy answers in this field, but if there are, perhaps a new administration with new men and a new approach has the best chance to find them."



MIKE MANSFIELD, probable Senate majority leader, will get a lot of help from Vice-Pres. Johnson, his predecessor.



ADAM CLAYTON POWELL strengthens Kennedy position in the House Education & Labor Committee when he takes chair.



CLINTON ANDERSON is next in line for chairmanship of the Senate Interior & Insular Affairs Committee.

ongress: More Pro-Kenne

One of the major puzzles of Washington is what the mood and inclination of the 87th Congress will really be, once the claims and counterclaims of the election aftermath are out of the way and serious business begins.

A new Congress is always an enigma. For one thing, it is an amalgam of many separate elections, with none of the centralizing effects of the two-man Presidential campaign.

This time, the closeness of the popular vote, strong religious emotions, bloc voting in Northern cities, and the crucial role of the South in the Presidential election surround the 87th with an extraordinary degree of mystery.

The 87th, in fact, still won't know its own temper when it convenes 45 days from now. But in the first weeks a dominating coloration, almost a legislative personality, will gradually

· GOP Gains-On their face, the election returns tell a simple enough story. At midweek, with the vote count still dragging on in a few close races, the Republicans had gained two seats in the Senate and 23 in the House. This is a greater gain than Democrats had been willing to concede to them, and it seems to give the 87th Congress a more conservative tone than its prede-

Republicans were quick to read it that way. Sen. Barry Goldwater of Arizona believes the election markedly strengthens the coalition of Republicans and conservative Southern Demoerats that has dominated legislation in recent years. Rep. Joel T. Brovhill, one of the Virginia Republicans who

won reelection, predicts that, as this coalition shows its strength. Kennedy will be "the most unsuccessful President in this generation" in getting legislation through Congress.

• Coalition in Action-As one example of this coalition at work, the conservatives cite what happened in the 86th Congress to aid for depressed areas. In the Senate, a bill favored by Kennedy got 45 Democratic and four Republican votes-a total of 49. It was opposed by 16 Democrats and 33 Republicansalso a total of 49 votes (two senators did not vote). And next year two additional Republican senators will fatten the coalition vote.

In the House, where the conservative coalition is usually even stronger, 179 Democrats and 23 Republicans-a total of 202-voted for the kind of depressedareas bill that Kennedy wanted. Opposed were 69 Democrats and 115 Republicans, for a total of 184. On sheer arithmetic, the switch of 23 seats from Democratic to Republican would reverse this outcome, and the conservative coalition would be on top in the 87th Congress.

But, as the professionals in both parties know, it is not a mere matter of counting noses. The best guess now is that Congress will finally be more pro-Kennedy than the election returns alone would indicate.

· Must Legislation-In particular, four pieces of basic Kennedy legislation must be given a better than 50-50 chance, even though the Democrats failed to enact them this summer when their numerical advantage was greater than it will be in the 87th. These are: aid to depressed areas, a higher minimum wage, aid to education (including teachers' salaries), and a health plan for the aged linked to Social Security.

· A Stronger Hand-Several factors are at work to strengthen Kennedy's posi-

One is the closeness of the national vote. To the same degree that it encourages Republicans, it scares Democrats. It is one thing to be beaten by a popular hero such as Eisenhower, who is above politics. It is something else to be almost beaten by Richard M. Nixon, a working Republican professional. To see Nixon virtually wipe out the huge Democratic advantage in voter registrations chills Democratic strategists in both the Northern and Southern wings of the party. Their first response is to draw closer together.

For the first time in almost 20 years. there may be a really skilled and persistent political operator in the White House, Franklin D. Roosevelt's days as operator virtually ended with World War II. Harry Truman never mastered that art, simply proposed long lists of Fair Deal legislation that Congress refused to take seriously. Eisenhower never tried to use the full power of the Presidency to bring Congress into line.

By all the signs, Kennedy will make the effort in the Franklin Roosevelt tradition. A President's power is enormous: Patronage, the location of military installations, the choice of new postoffices, threats of reprisal, promises of future favors, and just plain cajolery can bring stubborn lawmakers

into line.

· Senate Leadership-Vice-Pres.-Elect



ROBERT S. KERR may well succeed Lyndon Johnson as chairman of Senate Aeronautical & Space Committee.



WILLIAM M. COLMER, Mississippian who campaigned against Kennedy, may be ousted from the House Rules Committee.

Than It Looks

Lyndon B. Johnson is an added weapon in the White House armory. Sen. Mike Mansfield of Montana, who seems likely to succeed Johnson as Democratic leader in the Senate, was asked this week what he thought Johnson's role would be in the new Administration.

"I think he'll be down on the floor," Mansfield replied-which means Johnson will continue to be the focal point of Democratic maneuvering on the Senate floor. Johnson's Constitutional role as Vice-President-presiding over the Senate-plainly will be given the barest attention. Active management of legislation on the floor will be a new role for a Vice-President, and in Johnson's case it will be a plus for Kennedy.

· More Party Feeling-Among the Democrats, there will be a sharpening of partisanship and a greater attention to party lines. This will get Kennedy some of the votes he needs. Where Eisenhower blurred the partisan division and made it easy for Democrats to cross over to the Republicans on key issues, Kennedy will make such crossings as difficult as he can.

The strategy that may be tried to break up the conservative coalition on the House Rules Committee is an example of partisan feeling.

· Retribution-The target of this strategy may turn out to be not Howard W. Smith of Virginia, the committee chairman, who simply remained silent during the campaign, but William M. Colmer of Mississippi, who actively campaigned against Kennedy and Johnson in favor of his state's "unpledged" slate. Smith and Colmer, working with four conservative Republicans, often throw the Rules Committee into a 6-6 deadlock, sufficient to block any legislation they do not like.

If any attempt is made to remove Colmer, it will be on the ground that he forfeited his Democratic seniority by working against the ticket. Other Democrats who are tempted to stray from party regularity will get the message.

· Loyal Opposition-The Republican leadership-Illinois' Everett M. Dirksen in the Senate and Indiana's Charles A. Halleck in the House-will try valiantly to hold the GOP lines. They achieved a remarkable party discipline in 1959 and again in 1960-but that was with a Republican President to serve as a symbol of unity. Chances are good that Republicans will stray more often to the Democratic side in the next Con-

Out of the indicated net gain of 23 Republican seats in the House, 14 lie in the GOP heartland of the Midwest, where the freshmen members are likely to be most amenable to Halleck's leadership. But the others come mostly from the industrial Northeastern states. and Republicans from this area often follow the "liberal" Republican line rather than the "regular" line of Halleck and the Midwesterners. There may well be votes among this group for the welfare measures that Kennedy will ask Congress to approve.

Of the two additional Republican seats in the Senate, one will be occupied by J. Caleb Boggs of Delaware, not a liberal by usual Democratic standards but more liberal than the Democrat he defeated, J. Allen Frear. On some issues, Boggs may be voting with such

GOP senators as George D. Aiken of Vermont, Clifford P. Case of New Jersey, Jacob K. Javits and Kenneth B. Keating of New York, all of whom at times side with the liberal Democrats. Frear always voted with the Southern conservatives

· Heads of Committees-The elements that are working to strengthen Kennedy's hold over Congress will not show much in the visible machinery-the committee chairmanships, for example, will largely be in the same Southern

conservative hands.

In the House, however, the one exception is significant. Adam Clayton Powell, the New York Negro leader, takes over as chairman of the Education & Labor Committee from Graham A. Barden of North Carolina, who retired. Barden for years used his chairmanship to block legislation favored by Northern Democrats; Powell has made it clear he will do just the opposite. He is planning a major reorganization of the committee, is expanding the staff, and has promised Kennedy and Johnson he will have an education bill and a minimum wage bill out of committee by Jan. 30.

In moving up to the chairmanship of Education & Labor, Powell will surrender the chairmanship of the Interior Committee's subcommittee on mining. Rep. Ed Edmondson, who represents the lead and zinc area of northeast Oklahoma, will be the new head of that

subcommittee.

· Senate Shifts-There will be more extensive changes in the Senate. Retirement of Sen. James E. Murray of Montana opens up the chairmanship of the Interior & Insular Affairs Committee. Clinton P. Anderson of New Mexico is next in line for the post, followed by Henry M. Jackson of Wash-

The advancement of Johnson to the Vice-Presidency will leave a vacancy in leadership of the Aeronautical & Space Committee. The three senators next in line will have other chairmanships available, which means the top job here could fall to Robert S. Kerr of Okla-

The Democratic leadership will have an opportunity to plague conservative Harry Flood Byrd of Virginia, chairman of the Finance Committee, and will probably take advantage of it. Lee Metcalf, who won Murray's vacated Senate seat from Montana, may get the job. He was a liberal leader in the House and served there on the Ways & Means Committee, which handles financial legislation.

In recent years, Byrd has had difficulty controlling his committee, and Metcalf's arrival would compound his problems. Byrd remained silent during the campaign, thus making it easier for

Nixon to carry Virginia.

Spending Plans Shape Up Still Strong Despite Lag In Business

McGraw-Hill's fall survey reports a decline of only 3% from the expected 1960 figure. Continued weakness in business might pare 1961 plans some more, but hardly enough to induce a steep recession.

Business now plans to spend \$35.1-billion on new plant and equipment in 1961—down 3% from the expected 1960 figure. This is the key conclusion of the McGraw-Hill fall survey of capital spending plans, completed this week.

The modest size of the drop in planned capital spending comes as reassuring news to businessmen and government officials.

• Looked Worse—All this year, business has been operating short of its preferred percentage of capacity, and both sales and profits have been disappointing. So business has been shaving its capital spending plans as the year wore on (BW—Sep.10'60,p25).

Many economists expected this downdrift in capital spending to turn into a sharp drop next year—some respected business analysts have talked of capital spending cuts on the order of 10% or 15%. Such a steep decline in capital spending could induce a fairly severe recession next year, they said (BW—Sep.3'60,p30).

It now looks as though they were wrong. On the face of it, business seems willing to go ahead with sizable capital budgets in spite of this year's poor operating results. A 3% decline from this year's level would not be anywhere near enough to touch off a sharp recession.

• Caveat—However, the McGraw-Hill

With capacity to spare right now...

CAPACITY - RATES OF OPERATION

INDUSTRY	ACTUAL OPERATING(1)	PREFERRED RATE(2)
Iron and Steel	. 52%	98%
Nonferrous Metals	. 75	96
Machinery	. 72	92
Electrical Machinery		93
Autos, Trucks and Parts	. 86	94
Transportation Equipment		
(Aircraft, Ships, R.R. eq'pt.)		95
Other Metalworking	. 81	91
Chemicals	. 77	93
Paper and Pulp	. 90	100
Rubber		96
Stone, Clay and Glass	. 76	90
Petroleum Refining	. 83	97
Food and Beverages		93
Textiles		97
Miscellaneous Manufacturing.	. 84	94
ALL MANUFACTURING	. 79	94

(1) Actual operating rate in September, 1960; preferred rate at end of 1959.

(2) In month subsequent to model changeover.

Dept. of Economics, which conducts the capital spending surveys, has a word of warning: The \$35.1-billion forecast for next year should be regarded as an upper limit if business continues to be soft.

Experience in these surveys shows that during recessions, business tends to overestimate its spending plans, revising them downward as time goes on. This has already been happening in the current year—business now expects to spend \$2.5-billion less next year than it had talked about last spring.

Still, the showing in the latest survey is unexpectedly strong. Capacity may be in excess and sales expectations modest (charts), but companies are evidently spurred to continued investment in plant and equipment by (1) the need to cut costs in order to meet competition both at home and abroad and (2) the marketing opportunities opened up by the high level of spending on research and product development.

• New Products—Where new product opportunities seem strongest, companies are bent on actually increasing their capital spending next year. This shows up most clearly in the chemicals industry, one of the largest spenders on research and development. The industry has spent well over \$1-billion each year since 1951, but it plans to increase the annual investment by 2% next year,

mainly to create still more capacity to produce new products.

The automotive industry, whose introduction of new cars and new models hasn't run its course, also plans a big boost in investment next year for new plants and reconversion of existing plants. Already this industry has projects on the drawing board that would keep spending above the current level also in 1962.

The highest percentage increase in spending among manufacturing industries is credited to the electrical machinery industry, which is benefiting from strong sales abroad. The food and beverage and petroleum and coal groups also plan to increase capital spending next year.

• Chief Cutbacks—Steel is the most important industry that plans to cut spending next year. The anticipated cut is a hefty 10%, but the industry will still account for huge dollar volume—around \$1.4-billion next year. That would stand up as the third highest year on record, emphasizing the steel industry's determination to continue to modernize and get greater efficiency out of capacity that, on the raw arithmetic, already shows an excess.

A similar 10% cut is in the cards for the transportation equipment industry—aircraft, ships, and railroad equipment. This is the only industry covered by the

... And a modest rise in sales foreseen in 1961...

SALES	PERCENT CHANGE
INDUSTRY	(Physical Volume 1960-61
Iron and Steel	2%
Nonferrous Metals	
Machinery	5
Electrical Machinery	3
Autos, Trucks and P	
Transportation Equip	oment
(Aircraft, Ships, R.R. eg'pt.)	
Other Metalworking	
Chemicals	
Paper and Pulp	
Rubber	
Stone, Clay and Glas	ss 0
Petroleum & Coal Pr	
Food and Beverages	
Textiles	
Miscellaneous Man	
ALL MANUFACTUR	ING 3

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survey that expects an outright decline in sales next year from this year's level. Company executives attribute this to the railroads' retrenchment in capital spending and to the tapering of the airlines' buying of jet planes.

The textile industry plans to cut capital spending next year by 21%, the sharpest decline among manufacturing businesses. Other industries that plan to cut spending include paper, rubber, and the stone, clay, and glass group.

• Nonmanufacturing—Over-all, the nonmanufacturing industries indicate a slight decline in spending next year. But at least two industry groups—the electric and gas utilities and the commercial businesses—expect to spend a little more than they did this year.

The utilities report plans to spend 4% more next year. Gas utilities, particularly pipelines, have deferred some of this year's planned expenditures to next year. Prospects for higher spending by commercial business are based on the continued building of offices and on stepped-up buying of electronic computers and auto and truck fleets for business use.

The tailroad industry, which spent more than \$1-billion this year for roadbeds, rolling stock, and structures, plans a 25% cut in its spending. Other transportation industries—airlines, buses, shipping, and trucking—

...Business plans to reduce capital spending—but only moderately

PLANS FOR CAPITAL SPENDING (Billions of Dollars)

INDUSTRY	1959 ACTUAL*	1960 ESTIMATED	1961 PLANNED	1960-1961 % CHANGE	1962 PLANNED
ALL MANUFACTUR'G.	\$12.07	\$14.33	\$13.93	- 3%	\$13.35
Iron and Steel	1.04	1.52	1.37	-10	1.18
Nonferrous Metals	.31	.34	.34	0	.32
Machinery	.91	1.15	1.11	- 3	1.11
Electrical Machinery	.52	.62	.68	+10	.63
Autos, Trucks & Parts	.64	.89	.95	+ 7	1.02
Transportation Equipmen	nt				
(Aircraft, Ships, R.R. eq'pt.)	.39	.41	.37	-10	.35
Other Metalworking	.88	.97	.85	-12	.87
Chemicals	1.24	1.61	1.64	+ 2	1.59
Paper and Pulp	.63	.75	.69	- 8	.53
Rubber	.19	.24	.23	- 4	.20
Stone, Clay and Glass	.53	.63	.56	-11	.55
Petroleum & Coal Prod	2.49	2.45	2.52	+ 3	2.50
Food and Beverages	.82	.94	.99	+ 5	.97
Textiles	.41	.53	.42	-21	.40
Miscellaneous Manuf'g.	1.07	1.28	1.21	- 5	1.13
Mining	.99	.99	.90	- 9	.89
Railroads	.92	1.04	.79	-24	.83
Other Transportation				1 65 10	34
& Communications .	4.69	5.20		-11	4.18
Electric and Gas Utilities		5.89		+ 4	6.01
Commercial	8.21	8.61	8.70	+ 1	8.54
ALL BUSINESS	32.55	36.06	35.07	- 3	33.80

U.S. Department of Commerce, Securities and Exchange Commission, McGraw-Hill Department of Economics

(1) Figure based on large chain, mail order and department stores, insurance companies, banks and other commercial businesses.

report they have nearly completed their modernization programs and will reduce their spending sharply next year. The mining industry, suffering from overcapacity and price weakness, also plans to cut back.

• The Survey—The McGraw-Hill capital spending survey has an outstanding record in economic forecasting (BW—Oct.22'60,p160). It is based on companies' replies to a questionnaire returnable in October. The McGraw-Hill Dept. of Economics stresses that the returns indicate industry thinking at that time, with no provision for any changes that the outcome of the Presidential election may have made. But indications are (page 42) that the election is having little effect.

The companies that participate in the McGraw-Hill survey are usually the larger companies in their industry. However, a continuing effort is being made to include more medium-sized and smaller companies; more of these companies cooperated in this year's survey than in any previous year.

Companies included in the survey employ more than 50% of all workers in those industries where capital investment is highest—oil, utilities, railroads, chemicals, autos, and steel. Where coverage is less complete, companies are screened to provide a cross-section of their industry.

McGraw-Hill capital spending figures are now comparable directly with those of the U.S. Commerce Dept.-Securities & Exchange Commission surveys. Until recently, McGraw-Hill data differed in some details of how industries were classified and in using a petroleum industry figure that included some expenditures for current account. These differences have now been eliminated.

Attacking the Payments Deficit

- The President has ordered emergency steps to reduce U.S. military expenditures abroad and cut down dollar leaks through our economic aid programs.
- A new West German program of economic aid to underdeveloped countries should help, at least temporarily.
- Meanwhile, the narrowing gap between U.S. and European interest rates should slow down capital outflows.

Dramatic developments affecting the mounting U.S. balance-of-payments crisis came pell-mell this week.

Pres. Eisenhower issued a series of emergency directives to interested government agencies aimed at cutting down U.S. government spending abroad. They came on the heels of a Commerce Dept. announcement that the payment deficit reached a seasonally adjusted annual rate of about \$4.3-billion in the third quarter and that gold losses during the quarter had been about \$637-million. Privately, government experts estimated that the actual deficit for the year might well top last year's record deficit of \$3.8-billion. The gold drain this year already has passed \$1.3billion and threatens to take U.S. gold reserves below \$18-billion.

The West German government revealed a new billion-dollar program (4-billion DM) of economic assistance to underdeveloped countries. Indirectly this could help the U. S. balance of payments by giving the U. S. a chance to earn some German aid funds in international trade, by helping to limit increases in U. S. aid to needy countries. The proposed German program will be discussed with Chancellor Adenauer by Treasury Secy. Anderson and Under Secy. of State C. Douglas Dillon in Bonn next week.

Interest rate movements on both sides of the Atlantic promised to check—at least temporarily—the heavy outflow of U.S. short-term capital, which has greatly increased the balance-of-payments deficit this year. This result could be partly offset, however, if Ford Motor Co.'s offer to buy all of the stock of Ford of England is accepted.

I. The President's Action

Here are the emergency steps Eisenhower ordered as a means of cutting down U.S. military expenditures abroad and of preventing a transfer of dollars to Western Europe via our economic aid program:

• Return of 284,000 dependents

of servicemen abroad—at the rate of 15,000 a month, starting Jan. 1. (About 200,000 dependents will be allowed to remain overseas.)

 A substantial cut in Defense Dept. military buying abroad in 1961, plus a ban on Post Exchange purchases of foreign goods. (Embassy commissaries also are put on a "Buy American" basis)

• Economic aid of all types is to be tied primarily to the purchase of American goods and services, thus pushing the "tied aid" principle well beyond its present limited use by the International Cooperation Administra-

 The State Dept. is to continue pressing for tariff concessions in foreign countries, while the Dept. of Agriculture is to screen its local-currency sales of surplus farm products to see that the U.S. is not losing real cash sales

The military cutback would save up to \$500-million requiring the ICA to purchase where possible in the U.S. and would save approximately another \$330-million. The other actions called for, together, would bring total savings to around \$1-billion.

• Dramatic Move—The President's dramatic move and its timing was motivated by a number of considerations. He wanted to dramatize to the U.S. public, U.S. government agencies, foreign governments, and the international financial community the seriousness with which the Administration is taking the payments deficit and his determination to right the balance.

This, it is hoped, will strengthen Anderson's and Dillon's hands in urging Adenauer to take steps to ease pressure on the U.S. dollar. Germany has been the chief beneficiary of U.S. losses in international transactions. The German payments surplus and reserves are mounting fast.

At the same time, the President has put international speculators against the dollar on notice that it will be defended vigorously during the uneasy period of transition to a new Administration.

The timing of the President's action was determined partly by a desire not to introduce the delicate balance-of-payments issue too prominently into the election campaign, partly by the fact that the disturbing third-quarter payments figures became available only this week, adding urgency to the problem.

II. Germans' Move

Just how much the proposed new German aid program will help the U.S. balance of payments isn't clear at this stage. Anderson and Dillon will put two basic questions to Adenauer and his economic advisers next week:

• Is the aid program to be a continuing operation or a one-shot affair?

 How much German aid will be tied to purchases of German goods and how much will be free for spending elsewhere in the world including the U.S.?

The proposed sources of financing for the new aid program suggest strongly that what the Germans have in mind is establishing a revolving fund with a more or less rigidly fixed capitalization, rather than a continuing aid program. Also, since they apparently envisage making long-term loans to underdeveloped countries the fund is not likely to revolve very fast.

• One-Shot Sources—Of the total 4-billion DM to be earmarked for the aid fund, roughly 2.6-billion is to come from sources that can be tapped only once—a special loan by German industry, proceeds of the sale of the Volkswagen works to the public, Marshall Plan counterpart funds, a fund previously used for subsidizing exports.

The large contribution to be made by German industry also raises the strong suspicion in Washington that whatever the German government may say—in practice a big chunk of the funds will be tied in one way or another to purchases of German goods.

Even if the German aid program evolved into a continuing operation and proved not to be substantially tied to financing German exports, it still is uncertain how much it would do to reduce the U.S. payments deficit. Basically, this would depend upon how effectively U.S. goods could compete for German aid funds. The recent experience of the World Bank in which only about one-third of its loans have been spent in this country suggests that the U.S. would meet stiff competition. At the moment, of course, with Europe's resources fully employed

Associate Consultant Engineers: Charles W. Yoder & Associates Milwaukee, Wis. Fenner Brey Engineering Corp. Manitowoc, Wis.

Electrical Consultant Engineer: John H. Trester, Sheboygan, Wis.

Electrical Contractor: Keil & Werner Electrical Co. Neenah, Wis.



New bascule bridge equipped with ALLEN-BRADLEY QUALITY MOTOR CONTROL

Oneida Street Bascule Bridge over boat canal in Appleton, Wisconsin



View of Allen-Bradley control console which operates the warning lights, auto gates, and motors for the bascule bridge.



View of the special Allen-Bradley control panel housed in the base of the bridge tender's tower.

Here's a job that demands continuous motor control reliability. This requirement automatically suggests Allen-Bradley quality motor control. The simplicity of Allen-Bradley's famous solenoid design—with only one moving part—assures millions of trouble free operations. There are no troublesome bearings to corrode and stick—no flexible jumpers to wear and break. In addition, the double break, silver alloy contacts—a standard feature on all A-B control—never need servicing. They are always in good operating condition—there's never the need for contact maintenance at an awkward moment. Also, all A-B starters have reliable and permanently accurate overload relays to protect motors against burnouts.

Insist on Allen-Bradley motor control—its superior quality pays off through the years in reliable, maintenance free service.

Allen-Bradley Co., 1202 S. Third St., Milwaukee 4, Wis. In Canada: Allen-Bradley Canada Ltd., Galt, Ontario

ALLEN-BRADLEY

QUALITY MOTOR CONTROL

while the U.S. is in a slack period, the U.S. may have a greater than normal competitive edge in terms of shorter delivery lags and greater availability of goods. But the German program won't reach the contracting stage for some time and by then this cyclical advantage may be dissipated.

U.S. officials hope that the proposed German program is merely a stopgap effort pending the creation of new governmental machinery and the passage of the legislation necessary for a longrange continuing German government

aid program.

Some high Administration officials are urging the President to invite President-elect Kennedy to accompany him to next month's NATO meeting so that he can start coordinating policy with the European leaders. Kennedy almost certainly would jump at the offer but no decision has been taken.

III. Payments Picture

Meanwhile, the third-quarter balanceof-payments figures make gloomy reading. The deficit ran at a \$4.3-billion annual rate compared to \$2.9-billion and \$2.6-billion during the second and first quarters respectively. Gold losses rose to about \$637-million from \$94million in the second quarter and \$50million in the first quarter. Short-term capital outflows, primarily in response to higher interest rates in Europe than here, were the big factor in the rising deficit. The trade account continued to show a healthy surplus-\$5-billion at annual rate.

· Narrowing Gap-The disparity between U.S. and European short-term interest rates, which has been luring capital abroad, is narrowing. The United Kingdom and Germany have contributed to this by lowering their bank rates, and a further reduction in the British rate may be in the offing.

Then, the recent policy decision of the Federal Reserve-taken with an eve to easing the load on the balance of payments—to buy short-term govern-ment bills on the open market is boosting short-term rates here, further narrowing the gap. At midweek short-term rates had climbed to 2.6% from a low of 2.1%, and some issues were reported selling as high as 2.9%.

These combined interest rate trends by midweek had reduced the difference between U.S. Treasury bill rates and British Treasury bill rates to about one-half of one percent, a difference that normally would not tempt shortterm funds to move into London.

There are some signs that the flow of short-term capital abroad may be checked. The exchange rate of the pound began dropping slowly this week, indicating declining demand for ster-

Ford Offer Stirs British Ire

Deal to pay \$363-million for remaining stock of British Ford grouses political and union opposition. The question is why Ford wanted full control at this time.

Ford Motor Co.'s latest move to integrate its worldwide operations this week evoked cries of outrage from politicians and labor leaders in Great Britain, even some suspicion from the financial world toward what seemed a handsome offer for the 17,718,009 remaining shares of Ford Motor Co.,

Ltd., of Dagenham.

U.S. Ford already owns 54.6% of British Ford, though it has only minority representation on its board. The offer is to buy the remaining 45.4% of stock at 145 shillings (\$20.50) a share (before the offer, the market price was about 91 shillings). If all shareholders accept, this would come to \$363,219,184-among the highest prices ever paid to take over a company. Ford stipulates that not less than 75% of the stockholders, representing not less than 90% of total stock value, must agree to sell.

· Political Issue-Consent of the British government is also required for such a transfer from British to foreign hands. This could be a lively political issue for a while, with press and politicians storming about the danger of allowing half the British auto industry (Vauxhall is wholly owned by General Motors) to fall under Detroit's control. In the end, most London observers feel.

permission will be granted.

If this happens, and stockholders agree to sell their \$363-million worth of shares, the British Treasury would net about \$300-million for its gold and dollar reserves, though not all of this would necessarily require a new transfer from the U.S. The net figure allows for the estimate that 15% of the British shares already are held by Americans.

· Ford's Purpose-Ford's announcement, over the name of Chmn. Henry Ford II. says British Ford would continue under "the able direction" of Sir Patrick Hennessy, its chairman, "with-out change in its employment policy or in its development program."

"Our objective," Ford says, "is to obtain greater operational flexibility and enable us better to coordinate our European and American operations on a worldwide basis." The statement notes that creation of the Common Market and European Free Trade Assn. is likely to increase competition.

Industry people on both sides of the Atlantic accept this as far as it goes, but they say there must have been more urgency than Ford admits. Otherwise, they say, Ford would not have

chosen this timing, when signs are unpropitious on two points:

· The British auto industry is slowing down, and unions are quick to pin the blame on Detroit-its compact cars and its export sales campaign. Ford's announcement was greeted with distrust by unions that represent British Ford's 50,000 workers, of whom 40,000 are at Dagenham.

• The trend in U.S. private investment abroad has been running opposite from the direction of Ford's proposed move-toward joint enterprises with the citizens of a foreign land.

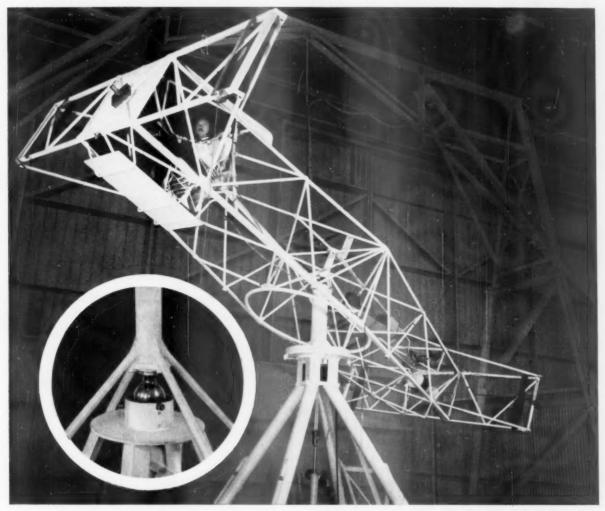
· Chance of Friction-Unlike GM's taut empire. Ford's foreign setup contains the clements of friction. The German company, Ford-Werke A.G., is 99% owned by Ford. But in 1959, Ford braved nationalist criticism in Canada to extend its stock control of Ford Motor Co. of Canada, Ltd., from 56.8% to 74.8%; Ford (Canada) has subsidiaries in countries including Aus-

In contrast, GM covers most of the foreign world with two wholly owned units: General Motors of Canada, Ltd., and the Overseas Operations Div., which includes Vauxhall cars and Bedford trucks in Britain, Opel cars and trucks in Germany, and Holden cars in

With only minority influence from Dearborn, British Ford has conceivably been working at cross-purposes with other Ford interests, particularly the German company. This month, for example, it held a "Ford of Dagenham Goes to Europe" show in Hamburg, which is Ford-Werke's Taunus territory. Under a global master plan, Ford Motor Co. may well wish to define marketing areas more precisely and more en-

· Ambition of Its Own-British Ford is second in its homeland only to British Motor Corp.; it is even stronger in exports to Europe, accounting for about 60% of cars, trucks, and tractors sold there from Britain. Last year, it produced 472,857 cars, trucks, and tractors; in the first half of this year, sales were up by one-third.

The British company is rounding out a \$216-million expansion program that started in 1955, and it has announced plans for \$196-million more, including a \$78-million auto plant near Liverpool that U.S. Ford is said to have opposed as not fitting in with its European plan-



MAKE-BELIEVE FLIGHT—Much of the feeling of flight in a space vehicle is experienced during a ride in this reaction-control simulator, being put through its paces

at Boeing Airplane Co., Seattle, Wash. The simulator rides atop the nickel alloy steel ball plated with Nickel in Boeing's ball-and-socket type air bearing.

Space simulator gives the "feel" of flight

Nickel-plated ball of high strength steel supports reaction-control test vehicle

This earthbound space machine is designed to test ways of controlling a vehicle as it pitches, rolls and yaws in the airless reaches of outer space.

In action, the simulator and its payload of test equipment can weigh as much as 5,000 pounds. Yet the necessary sensitivity is achieved by floating the unit on an air-cushion bearing made of a high strength nickel alloy steel ball in its socket.

Imagine this 2½-ton load resting on a ball about the size of a grapefruit! The ball, made of nickel alloy steel heat treated to a tensile strength of 180,000

to 200,000 pounds per square inch, stands up to the load. To provide a hard, smooth surface, the ball is plated with one-thousandth of an inch of Nickel. This uniform surface keeps air leakage in the bearing to a minimum.

Remarkably durable, Nickel and its alloys offer practical solutions to problems of stress, fatigue, abrasion, corrosion or temperature extremes. Used in

alloys, in plated coatings or by itself, Nickel helps make possible many new products and processes—and can help improve existing ones—by providing unique combinations of properties.

Can we help you solve a difficult problem in materials? Perhaps you or your engineers can profit from the technical data we have on hand. This information is yours for the asking.

THE INTERNATIONAL NICKEL COMPANY, INC.

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NICKEL MAKES ALLOYS PERFORM BETTER LONGER

In Business

Antitrust Trial Postponed Again In First of Electrical Equipment Cases

The first of 20 antitrust trials of 29 electrical equipment companies was postponed this week for the second time; it's now scheduled to start Nov. 21 in federal

district court, Philadelphia.

It was disclosed that the Justice Dept. has backed away slightly from its demand for pleas of guilty or not guilty. The antitrusters said that in 13 of the cases they would not oppose nolo contendere pleas by either corporate or individual defendants. This would leave acceptance of such pleas up to the judge. (Nolo pleas would be a serious barrier to customers of the companies who might wish to sue for damages if the companies pleaded guilty.)

But the government's concession was only in cases involving relatively small equipment. It still opposes nolo pleas in seven cases involving turbine-generators,

power transformers, and other large items.

Supreme Court to Rule on AEC Method Of Licensing Industrial Reactors

The U.S. Supreme Court is expected to make its decision early next year on a significant test of the way the Atomic Energy Commission licenses reactors for use.

At issue is the Enrico Fermi power plant being built near Detroit by Power Reactor Development Co., a group of private utilities led by Detroit Edison Co. In 1956, AEC gave the group a construction permit, but the project was attacked by three AFL-CIO unions, which claimed that the permit was issued before a site had been picked or the safety of the project determined. AEC says it has had no safety troubles with reactors.

The case moved through the federal courts and last summer the District of Columbia Court of Appeals held that the government had not determined whether it was safe to put the fast-breeder reactor in a highly populated

This week the Supreme Court agreed to consider:

· Whether AEC may issue a provisional construction permit before deciding whether there is no danger to the public.

· Whether AEC may authorize a site near a population center without "compelling reasons" that it be precisely there.

Remote Control Repair of Reactor Leaks

Working by remote control through a 20-ft. shield of water, technicians have just finished doing an extraordinary patching job on two small leaks in the inner tank core of the Experimental Homogeneous Reactor (HRE-2) at the Oak Ridge National Laboratory.

The specially designed periscope, mirrors on hinged arms, lights, cutting torches, and other tools all had to be passed through a hole, only 21 in, in diameter, in the

HRE-2 is fueled by fluid uranyl sulfate; all other U.S. power reactors use solid fuel. The holes that developed in the core are blamed on "hot spots" on the tank wall caused by flow conditions of the fuel.

Use of Imported Structural Steel In South Faces Code Obstructions

Use of foreign structural steel in Southern towns is facing trouble under a new program adopted by the Southern Building Code Congress, a group of some 500 municipal officials who police the standard building code in more than 900 cities and towns.

The congress from now on will require that foreign steel be tested in a lab approved by the American Society for Testing Materials, whose standards have long been mandatory under the code. In the case of domestic steel, SBCC will continue to assume automatically that it meets standards.

A congress spokesman laid the action to several failures in recent years in structural steel construction, where foreign steel was "suspected" because of laxity in the

enforcement of the SBCC rules.

Southern newspapers have been featuring stories about the harm that imported steel has been doing to U.S. mills. Arthur V. Wiebel, president of U.S. Steel's Tennessee Coal & Iron Div., welcomed the SBCC action, saying that "it is gratifying that the congress has recognized one of the many reasons it is better to specify American-made steel."

Agency Startles Ad World by Dropping 15% Commission Basis on Shell Account

Madison Avenue showed shock this week as Ogilvy, Benson & Mather, Inc., confirmed that it was breaking with the 15% commission system for its new client, Shell Oil. The agency has previously been noted for such pace-setting campaigns as its eve-patched sophisticate for Hathaway Shirts.

Ogilvy's contract commits it to charging a fixed 25% of a marketing budget running between \$35-million and \$40-million. The agency figures this 25% will split up in approximately equal parts between income taxes, profit sharing, and net profit—this but roughly equaling the 10% profit on billings realized by most good-sized agencies. The contract will be renegotiable from year to year.

The Ogilvy-Shell agreement threatened to upset advertising compensation arrangements that have prevailed for over 50 years. Both agency and client regarded the agreement as experimental. They spotchecked media for possible resistance to the plan-and report little criticism. The agency notes that it will probably continue to receive the 15% commission from the media and refund it to the client.

Most agency reaction was noncommittal, although several admen stressed the dangers of price wars.



A special impression that won't dent your budget

With Buick's special-size Special in your fleet, you get the room, ride, go and prestige of the big cars . . . with the savings and ease of the small!

Buy Buicks for your salesmen?

Why not... when you get big-car go—on up to 40% less gas (lower-cost regular gas)! When you get a Buick "all-day" ride that lets you drive—and arrive—relaxed!

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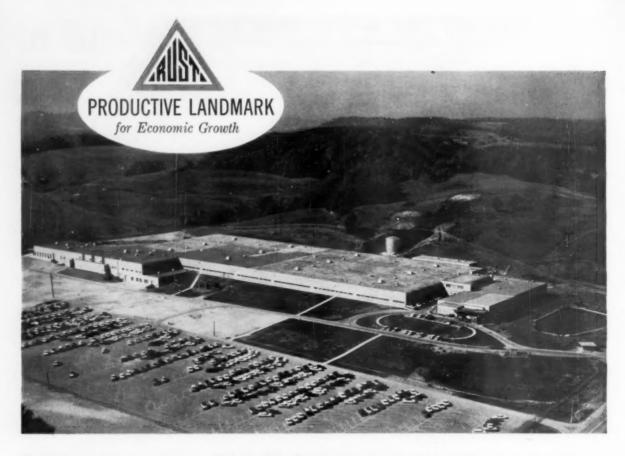
And it's got a new 155-h.p. aluminum V-8 and aluminum transmission* that give you twice the pow per pound of most compacts.

Add to this the *prestige* your company representatives gain by driving a Buick... the longer-lasting Body by Fisher... and Buick's bigger trade-in value. All at a price *just a whisper above the compacts!* Why not get all the facts from your Buick dealer... or contact Fleet Sales Manager, Buick Motor Division – General Motors Corporation – Flint 2, Michigan.

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Robertshaw's new \$4,000,000 Automatic Controls Plant constructed by RUST

An entirely new \$4,000,000 manufacturing, engineering and laboratory facility for the Robertshaw Thermostat Division, Robertshaw-Fulton Controls Company, has just been completed at the New Stanton

Interchange on the Pennsylvania Turnpike. This new "Productive Landmark" was engineered and constructed by The Rust Engineering Company.

The 267-acre plant site has space under roof equal to seven football fields. Besides 284,000 sq. ft. in which to produce appliance controls, such as "Flame Master", the new plant houses a research laboratory and 62,000 sq. ft. of office space.

Rust has designed and constructed many "Productive Landmarks" for a variety of industries.



Office entrance to Robertshaw's new automatic controls plant.

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WASHINGTON OUTLOOK

WASHINGTON BUREAU NOV. 19, 1960



The big, early domestic trend under the Kennedy Administration:

Major federal help in solution of big city problems. The Presidentelect owes a big political debt to the urban industrial centers. They voted heavily for him. But this fact merely provides Kennedy with extra zest for the job of helping them. He would have undertaken it, anyway.

A new Cabinet-level Dept. for Urban Affairs is a key element in the Kennedy approach.

As Kennedy visualizes it, this department will coordinate, initiate and direct federal aid programs in both private and public housing, mass transit, air and water pollution, slum clearance, and urban renewal.

Kennedy is likely to seek renewal of authority to reorganize the executive branch of government. It was this power that Pres. Eisenhower invoked in the early days of his first Administration to create the Dept. of Health, Education, & Welfare. In fact, this power is essential for Kennedy to get reorganization of the Defense Dept. and other agencies as well.

A political fight may surround the idea, but the new President seems certain to get his way on this one. The new Urban Affairs Dept. will surely become one of the major spenders inside the executive wing of government. Moreover, it can become a base for building political allegiances that both Kennedy and the Democrats will find useful in future elections.

Some of the basic advice Kennedy will get about regulatory agencies from James M. Landis, a veteran of service on several of the agencies and now the President-elect's chief adviser on their function and conduct:

Extreme care must be taken with appointments. Landis thinks that regulatory commissioners should be required to pass formal qualification tests, much like those required of federal judges.

Procedural rules must be strengthened to avoid unnecessarily drawnout hearings. Landis believes hearing examiners should be given more authority to combat delaying tactics.

Top agency members should devote more time to "policy thinking" —a thing that they can do only rarely under the present setup.

Among other things, Landis favors creation of an appellate system under which decisions of hearing examiners could be, in routine cases, reviewed without going to the top level of a given agency.

Landis is setting up a Washington office, where he will spend the next several weeks conferring with top officials now in the regulatory agencies. His reports to Kennedy will be delivered in stages, over a period of months, but Landis took on the advisory job with some well-established opinions—assembled during his own service on the Securities & Exchange Commission, the Federal Trade Commission, and the Civil Aeronautics Board.

Vice-Pres. Nixon starts quickly to build for 1964. His decision to keep Sen. Thruston B. Morton, his trusted political ally, as the Republican National Chairman is one clear sign that Nixon firmly intends to make another run for the Presidency four years hence.

As titular leader of the GOP, Nixon has several important chores. One of the foremost will be to keep the Goldwater and Rockefeller wings of the party from engaging in destructive political warfare. Nixon also sees

WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU NOV. 19, 1960

himself, his associates say, as becoming the party's principal national spokesman on large public issues. More than that, the Vice-President intends to keep busy as the party's chief morale rebuilder and money raiser.

Eisenhower's economic legacy to Kennedy was revealed this week at the annual outlook conference of the Agriculture Dept.

Eisenhower's official assessment of business this year and next will come in January in the State of the Union address, the Budget Message, and the report of the Council of Economic Advisors.

But in recent years the Agriculture conference has set the tone for the subsequent official messages. What the top government economists say at the conference pretty much lays out the professional ground rules for what the President says later.

Here's how they see 1961:

On balance a year of growth over 1960 with a decline in business spending for new plant and equipment offset by moderate increases in consumer buying, a substantial rise in government outlays, and possibly a modest gain in housing starts.

This is "only mildly hopeful," Woodlief Thomas, Federal Reserve Board economist, pointed out. A panel of government experts including Louis J. Paradiso of the Commerce Dept., James W. Knowles of the Congressional Joint Economic Committee staff, and Aryness Joy Wickens of the Labor Dept., differed on details but agreed on the trend.

A rise in government spending is the biggest plus factor for next year, Nathan M. Koffsky, one of the Agriculture Dept.'s top economists, told the conference. He sees federal outlays rising \$3-billion in the current fiscal year, while state and local government spending goes up \$3-billion to \$4-billion. Last week's election, in which voters approved about \$3-billion in new bond issues, indicates no let up in public works.

A rise in consumer spending is also expected—but here there's more guesswork. In the July-September quarter, consumers cut spending despite a \$3.4-billion rise in incomes. In response, the share of current income saved jumped to over 8%, the highest in three years. Koffsky does not believe this is the beginning of a trend. He feels the third quarter pause "will likely give way to enlarged spending," at least to a level in line with still-expanding incomes. He warns against expecting a vigorous upturn in consumer durables, however.

Inventory buying continues to puzzle the analysts.

The government economists agreed with Koffsky that the \$11.4-billion contraction in inventory buying since the first quarter "should not be prolonged." But nobody said it was over for sure.

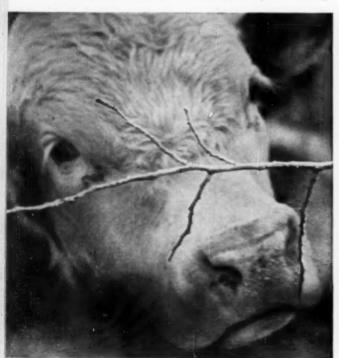
A round of price reductions to stimulate growth was advocated by Thomas, who usually reflects the views of the Federal Reserve Board of Governors. He told the conference that the whims of consumers are going to be more important in the future than anything the government can do to keep the economy on an even keel. This same view is likely to be stressed in Eisenhower's farewell advice to the new Administration, but it does not seem destined to inspire Democratic cheering.







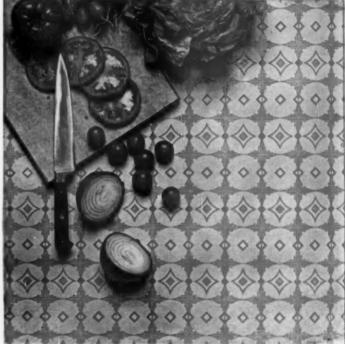
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PRODUCTION



ELECTRONIC computer at Moscow's U.S.S.R. Academy of Science helps scientists tackle automation problems.

Russians Drive for Automation

A Soviet official called a press conference in Moscow recently and announced that the U.S.S.R. had developed open hearth and blast furnaces that are more efficient than anything the U.S. steel industry has to offer. A key ingredient: automation.

The partially automated Red Proletarian Machine Tool Plant in the Soviet capital mass-produces 1,000 lathes per month, and some of them are spilling

over into Western markets.

American experts who visited Mos-cow last summer found that Soviet scientists have done work in automation theory that, in some respects, goes beyond anything yet done in the U.S. and literally thousands of scientists and engineers are being mobilized in a determined effort to transform theory into production-line knowhow.

Typical of this mobilization is the rapid buildup of special automation application institutes attached directly to Soviet planning bodies at the regional level. Four are already in existence, of which the two-year-old institute at Kiev with its 2,000 engineers is the largest

and most ambitious.

I. Russia's Challenge

All this highlights a fact that may have far-reaching impact on American businessmen: The Russians are making a mammoth effort to change the face of Soviet industry through automation; the extent to which they succeed will be a major factor in their struggle to surpass the U.S. as the world's foremost industrial power.

A visitor to the Soviet Union may well wonder what all the shouting is about. For while his Muscovite hosts talk expansively about plans to automate mills, plants, and refineries, he will notice, for example, that in many government offices the abacus is still the standard calculating device. Or he will be struck by such anomalies as the housing shortage, or the absence of safety glass in Soviet automobiles, or the lack of simple essentials like quality string and wrapping paper in department stores.

And if the visitor calls at Moscow's Institute of Automation and Telemechanics where some of the Soviet Union's best automation experts are at work, he will ride an elevator that would have been considered obsolete in the

U.S. 25 years ago.

It is the problem of reconciling these signs of backwardness with such impressive technological feats as the Russian space probes that so often perplexes any outsider trying to decide just how seriously he should take Soviet tech-

nology.

• First Things First-One Western control engineer, fresh from a trip to the Soviet Union, explains that the Russian technological effort is "essentially a narrow-band pulse system and consequently has a low mean level of achievement." In layman's language he is observing that the Soviets throw tremendous energy and resources into accomplishing a few high priority goals. But to do so, they must neglect wide areas of technology and hope they can fill in the gaps later. Hence, the general low standard of living as contrasted with spectacular scientific successes in

rockets and space.

The reasons for this lopsided picture lie deep in the nature of Communism itself, with its belief in centralized planning and control. The impetus for technological development comes not from the industry or individual plant, as it would in the U.S., but from the Kremlin's planners who set up a system of carefully chosen priorities. Sectors of industry low on the priority list are apt to get short shrift when scarce manpower and materials are parceled out.

Under this system of "first things first" great bursts of effort have gone into building individual industries. In the 1930s, steel and electric power got top billing; more recently chemicals and housing have been stressed.

· Thorough Overhaul-However, as the Soviet Union challenged U.S. supremacy head-on in the post-Stalin era, it became obvious that only a sweeping modernization of industry across the board would meet the need.

The current Seven-Year Plan calls for tremendous increases in industrial production. By 1965, the plan's target year, over-all industrial output is supposed to be up 80%. And Premier Nikita Khrushchev has said that by 1970 he wants Russia to surpass the U.S. in per capita production and living standards.

To meet these goals, the Soviets plan to pour even more manpower into the industrial machine, but they are also aware that the average worker

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THE TOP TWO FOR THE MONEY



produces less than half as much as his American counterpart. They aim to increase worker productivity by as much as 50% in industry and even more in other areas. Three-quarters of the increased industrial output by 1965 will come from higher productivity.

At the same time, the planners are deeply worried about the low quality of output at many plants. With most industrial workers just off the farm, the rejects at times reach ruinous levels.

To the Kremlin, solution of all this is summed up by "mechanization and automation," two words that have been almost deified in the press over the past three years. The Seven-Year Plan calls for installation of 1,300 automatic lines by 1965, and a start on automation of entire factories from unloading of components or raw materials to packaging the finished product.

II. Automation So Far

Granting the sweeping nature of the Soviet program, skeptics are justified in asking just how well it is working out in practice. The answer seems to be: not very well—vet.

Automation is hardly the kind of thing that can be turned on like a light switch, even in a totalitarian society. The Soviets are finding this out.

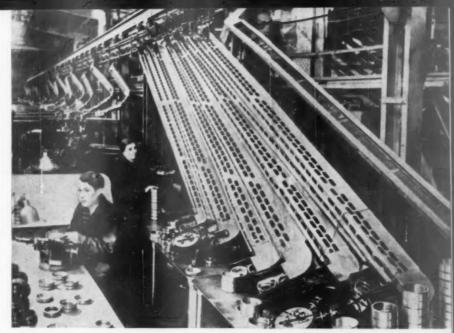
• Boost From Rockets—When the green light was given to industrial automation in 1957, they obviously had a ready-made reservoir of experience gained from work in guidance systems for space satellites and military rockets. Western scientists have been impressed not only by the apparent accuracy of the rockets, but by the mastery of computer techniques indicated at the ground tracking stations.

• On the Line—In addition, Russian automatic control engineers had already wet their toes on the production line. For example, the Ulyanov Small Engine Works has been turning out pistons on an automatic line since 1951—this was apparently the Soviets' first major effort in the field. All operations, starting from the melting of aluminum pigs and ending with the packing of tested and sorted pistons into boxes, are performed automatically, according to the Russians.

The Ulyanov plant also provided Soviet engineers with their first taste of snags involved in introducing complex systems. In 1956-57 a modification program was required to eliminate earlier design faults, and at the same time other improvements were made.

An automatic line for machining wire-rope pulleys in a Chelyabinsk factory is attended by one lone operator, according to reports. It paid for itself less than a year after installation.

At the First State Ball-Bearing Works in Moscow, where automatic lines were



AUTOMATED line in a ball-bearing plant is one of the first such lines for various processes introduced in Soviet industry that foreign visitors have been allowed to see.



FINISHED ball-bearings at automated plant are tested and packed into boxes by machine. Russians say they are vastly superior to those produced in conventional plants.



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automation is much more the exception than the rule in Russian plants . . .

(STORY on page 59)

set up in 1955 to machine and assemble bearings, Soviet experts claim that 90% to 95% of the bearings produced there are more accurate and will last longer than those produced in a con-

ventional plant.

Other examples can be cited-but not many. It is obvious from the Soviets' own statements that so far automation is much more the exception than the rule in Russian factories. This is undoubtedly due in part to its priorityshort status in past years, but Western experts have also theorized that the few automated plants have served primarily as prototypes for Soviet designers and engineers to get the feel of problems encountered.

III. The Theory-Practice Gap

The questions currently exercising the minds of Western production and control experts is: "What is going to happen now?" Will the Soviets be able to put real steam into their automation program? Can they overcome the very real obstacles that are cropping up?

Answers to these points are hard to come by, for the Soviet Union is still a closed society to a great degree. However, Western experts got their best look at Russian progress last June at an international conference held in Moscow. And the thing that surprised them was the Soviets' tremendous emphasis on pure theory. A deeply ingrained love for theory dates back to czarist Russia, which produced mathematicians of world renown.

· Abstract Conversation-Russian delegates, for example, unveiled abstract designs of ultimate control systems operating over a complete plant. They spoke volubly about optimal control techniques under which "the brain" chooses the best solution to a given production problem, and about selfadaptive systems that automatically correct any of these advanced systems were in fact operational, the Soviets replied,

"We have a few."

One example quoted was the optimising of a radio transmitter to give maximum power output continuously. In the machine tool control field, although the Sverdlov Machine Tool Plant in Leningrad was awarded a Grand Prix medal at the Brussels Exposition in 1958 for its program control machine tool, none was in evidence at the plant. The plant director explained they will be manufactured "next year." · Old Chestnuts-Most of the plants



Marking another Milestone



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. . . over 40 laboratories are investigating different areas of application . . .

(STORY on page 59)

on the tour list were old chestnuts that have been viewed by foreign visitors in past years. At the 19 institutes and enterprises opened to them, delegates saw evidence at only one of practical hardware that could be used for optimising an actual production process.

On the basis of what they saw and heard in the Soviet Union, American experts generally agree that the Russians are very strong in theory—perhaps to the point of overemphasis—but America is presently far ahead in industrial applications.

dustrial applications.
Professor Rufus Oldenburger of Pur-

due sums it up this way:

"In the U.S. I am a theoretical mathematician, but I also help turn my ideas into hardware. . . . I think here is the weakness of the Soviet situation. As I see it, Russians are strong on theory because they start from the other end: They love mathematics."

IV. More Institutes

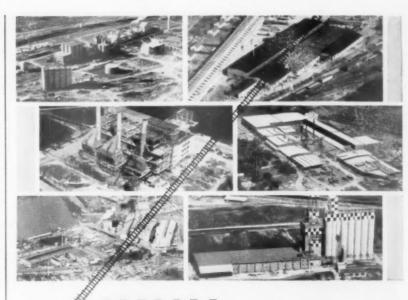
The Soviets clearly recognize the wide gap between theory and practice. As Trapeznikov, chairman of the U.S.S.R. National Committee of Automatic Control, put it at the Communist Party's Central Committee meeting in July: "The situation for materialization of ideas is absolutely unsatisfactory."

To meet this problem, the Russians are turning to organizational solutions. Specifically, their answer is more institutes—this time designed particularly to apply the theoretical work of such institutes as Moscow's IAT to plant prob-

• Impressive Buildup—The buildup of the institute—located in the Ukraine, Armenia, Georgia, and the Russian Republic—is impressive. In the Ukraine's automation institute at Kiev, over 40 laboratories are investigating different areas of application. In addition, four field stations have been set up in the main industrial areas of the Ukraine.

Each laboratory deals with the complex automation of a different industrial process. Fifteen plants in the Ukraine are slated to be brought under complete automatic control by 1965.

Direction of these new application institutes is the responsibility of the regional economic planning body. But plants may submit research and development projects to the planning organization, which will forward them to the institute if it approves. In these cases payment for the institute's research work is made partly by the



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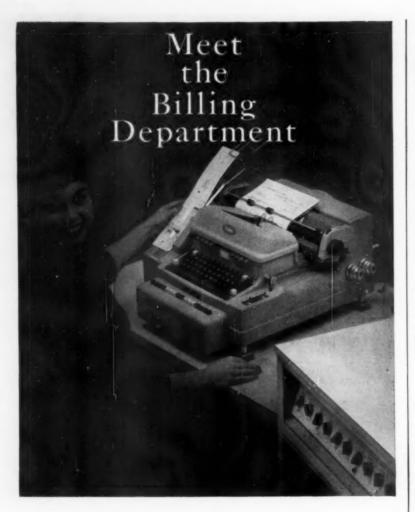
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SALES, SERVICE AND INSTRUCTION THROUGHOUT THE U.S. AND THE WORLD

... the theoretical scientist outranks those who soil their hands with developmental work . . .

(STORY on page 59)

plant initiating the request and partly from local government funds.

A total of 20,000 engineers is expected to be involved in this new automation application effort on the part of the four institutes by 1965.

 Products at Kiev—A look at what the Kiev institute is doing may be indicative:

Standard instrument panels have been designed for control of open hearth furnaces, and the latter, the Russians claim, are being constructed within six months. The panel includes a simple analog computer that calculates the heat input to the furnace, and another that determines the heat absorption and efficiency so that optimal heat conditions may be set up. At present the computers provide only dial indications to guide the operator. But in 1961 engineers expect to couple the computer outputs directly to the furnace controls.

In the electric power distribution field, the institute is following on the heels of U.S. practice in installation of a transistorized analog computer to link 13 Soviet power stations in a single grid with the computer providing distribution of power supply at minimum cost. Other projects at the institute cover blast furnace investigations on model furnaces, automatic startup of boiler and steam turbines, machine tool control and automatic flame-cutting equipment for profiling ships' plates.

Whether these application institutes will actually get theory transformed into workable automation hardware is impossible to say. Certainly a number of essential ingredients for success are there: government backing, adequate funds, apparently adequate staff, good information on developments in the outside world, and—on paper—means of direct entry into plants themselves.

• Possible Snags—However, close Western observers suspect that this effort may be bogged down by the same factors responsible for the theory-practice gap in the first place. The reasons:

• Under the Soviet class system, the theoretical scientist outranks those who soil their hands with developmental work. Hence the best brains go into basic research, and the typical scientist is apt to think he degrades his position by descending from these lofty altitudes to the engineering job of designing and building something that will work.

· The bureaucracy of the Soviet



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system discourages decision-making. It is one thing to draw up a beautiful automation plan on paper and quite another to take responsibility for putting it into practice. Past experience in other areas of technology shows that overcaution had led to delays in final design approval and acceptance of new hardware.

• Duplication of effort is another stumbling block. When British scientists recently visited five Soviet automation institutes, they found that all five were engaged in studying automation of rolling mills and blast furnaces. While Soviet automation journals indicate that the institutes know what their fellow scientists are doing, there is no evidence that this duplication results in the kind of competitive spur that occurs in the West.

• Lack of standardization worries the Soviets. A process worker at a Moscow refinery complains that "after two years of operational experience with a newly designed pneumatic control system, instruments were not interchangeable, the plug-in connectors were not airtight, instability occurred in the meters, and the chart mechanisms jammed." Soviet experts admit that quality and reliability of automation gear is one of their chief problems.

V. What Lies Ahead?

Taking a good hard look at the massive Russian automation effort, Western experts note that if the Soviets achieve only 70% of their stated goals, the results will be formidable for the West and its businessmen.

The application effort is aimed at basic industries—steel, power, gas, etc.—all fields where cost reduction and increased productivity would effect the

whole industrial system.

That the Soviets will hit snags is sure because this massive effort—unlike those applied to individual industries before—is being applied across the board to pull up broad areas in one swoop.

One American expert thinks they will get into trouble: "If the Russians try to go straight from manual or partially automatic control to full closed-loop computer control, they will probably fail and have to backtrack through the same kind of development we went

through."

But another expert is less confident: "Up to now the West has had a clear lead in the industrial field, and we still do. But steaming up behind us at a rapid rate are the Soviets. By 1963 or 1964 they will begin to breathe down our necks in some specialized areas. To meet this threat the West must look to its industrial applications rate. A totalitarian approach with centralized direction is the Soviet way. Ours must be closer industrial cooperation." END

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Travelling 19-inch Column Openside Boring and Drilling Machine The American Tool Works Company G-E Mark II Numerical Positioning Control



Turre-tape Six-spindle
Turret Drilling Machine with
B&S 15" by 20" Positioning Table
Brown & Sharpe Manufacturing Co.
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Numericam Cam Milling Machine Brown & Sharpe Manufacturing Co. G-E Mark II Numerical Positioning Control



Burgmaster Eight-spindle Turret Drilling Machine Burg Tool Manufacturing Co., Inc. G-E Mark II Numerical Positioning Control



Burgmaster Eight-spindle Turret Drilling Machine Burg Tool Manufacturing Co., Inc. G-E Mark II Numerical Positioning Control



Spindlemaster with Automatic Tool Changer for Drilling, Tapping, Boring, and Milling Cleereman Machine Tool Corporation G-E Mark III NPC



Edlund-Matic* Drilling and Tapping Machine Edlund Mach'y Co. Div., Harsco Corp. G-E Mark 11 NPC



Milwaukee-Matic Model IF Drilling, Milling, and Boring Machine Kearney and Trecker Corporation G-E Three-motion Numerical Positioning Control



Milwaukee-Matic Model 11 Drilling, Milling, and Boring Machine Kearney and Trecker Corporation G-E Four-motion Numerical Positioning Control

They stole



Vertical Knee-type Milling Machine Kearney and Trecker Corporation G-E Mark Century Numerical Control



Tape Turn Lathe
The R.K. LeBlond Machine Tool Co.
G-E Mark Century Numerical
Contouring Control



Hole Locator and Twin Head Drilling Machine for Printed Circuit Boards Leland-Gifford Company G-E Mark II NPC



Single-spindle Drilling Machine Leland-Gifford Company G-E Mark II Numerical Positioning Control



Five-inch Horizontal Boring, Drilling, and Milling Machine with Automatic Tool Changing Lucas Mach. Div., New Britain Mach. Co. G-E Mark 111 NPC (Numra-tronic)



Five-inch Floor-type Horizontal Boring, Drilling, and Milling Machine Lucas Mach. Div., New Britain Mach. Co. G-E Mark II-M NPC with Accupin Feedback (Keytronic)



Vertical Spindle Machine with Automatic Tool Changer Sundstrand Corporation G-E Mark III Numerical Positioning Control



Turret Punch Press Wiedemann Machine Co. G-E Mark II Numerical Positioning Control



Burgmaster Six-spindle Turret Drilling Machine Burg Tool Manufacturing Co., Inc. G-E Mark III Numerical Positioning Control



Burgmaster Six-spindle Turret Drilling Machine Burg Tool Manufacturing Co., Inc. G-E Mark II Numerical Positioning Control



Burgmaster Six-spindle Turret Drilling Machine Burg Tool Manufacturing Co., Inc. G-E Mark II Numerical Positioning Control



Burgmaster Eight-spindle Planer-type Turret Drilling Machine Burg Tool Manufacturing Co., Inc. G-E Mark II Numerical Positioning Control



Continuous Path 3-dimension Profiling and Scribing Machine Ekstrom, Carlson & Company G-E Numerical Contouring Control



Layout Drilling Machine Fosdick Machine Tool Company G-E Mark II Numerical Positioning Control



Fosmatic Turret Drill—32 Spindles with Automatic Depth Control Fosdick Machine Tool Company G-E Mark II Numerical Positioning Control



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In Business Abroad

British Auto Makers Continue Layoffs; But Other Signs Are Encouraging

The downturn in the British auto industry deepened

and spread this week.

Pressed Steel Co., which supplies bodies to most of Britain's auto makers, says that it will dismiss 1,100 employees within the next few weeks. The company blamed "a substantial reduction in schedules from customers"

Automobile companies are coming up every week with new cutbacks. British Motor Corp. has announced a reduction that will put the majority of its employees on a three-day week. Standard-Triumph International is laying off 241 staff clerks and technicians; last week, it fired 1,700 hourly workers.

The exception to the downward trend is Jaguar Cars, Ltd., which said this week that it is producing at the

highest level ever.

Other signs in the British economy are encouraging. Industry's plans for investment, notably of the automobile and steel companies, are still holding up. Prices are steady.

The next few months will tell whether the British economy slips into recession. The government thinks the chief threats to stability are (1) the possibility of hikes in wages and costs over the coming months, and (2) the danger that imports will continue rising while exports continue to sag.

Far-Apart Russian Oil Deals Hit Major Oil Companies

A series of far-apart incidents troubled the major international oil companies this week, loosening their hold on several markets. The Russians are involved in most of them.

In Italy, a reported deal with the Soviet Union will bring in 100,000 bbl. of Russian oil a day in exchange for oil pipe. This oil, priced almost 50% below crude oil from the Middle East, will furnish 20% of Italy's oil requirements.

În India, a price war has broken out. The Indian government has set ceiling prices for petroleum products used by state-owned transport corporations. But the transport outfits may buy from whom they like—and they are playing the companies off against each other. The importing of Russian oil by the government-owned companies further weakens prices.

In Ceylon, the government is considering a plan to import Russian oil, which it will sell at a reduced price. The Soviet oil will go first to government military and transport services. When their requirements are filled, the government will sell on the open market.

In Japan, Yoshimaru Kanno, managing director of the

MORE NEWS ABOUT BUSINESS ABROAD ON:

• P. 74—Ancient Milan sparks industrial renaissance that thrusts Italian names into households and corporation headquarters around the world.

Arabian Oil Co.—a Japanese company, says his company has nearly completed negotiations with several U.S. banks for a loan of \$50-million. The funds will be used to develop offshore concessions in the Persian Gulf, the crude from which will be sold in Japan. Unless Japan develops its own sources, Kanno says, it may be forced to import Russian crude.

Machinery Orders Keep Coming In West Germany's Industrial Boom

West German machine builders are flooded with orders, as the economic boom continues in that nation,

During the first six months of this year, the value of machine production was \$2.6-billion, up 18.4% from the corresponding period last year. Exports increased 15.9% to slightly more than \$1-billion.

This is only half the story. Current incoming orders are up a smashing 41.2%, even though prices have risen 5% during the last year. Incoming orders exceeded

output by 30% during the first half.

West German industry's craving for machinery extends abroad. Although comparatively small, machine imports are up more than 40% to \$230-million.

Bolivar Selling Around 4.25 to the Dollar As Venezuela Seeks to Protect Reserves

Venezuela's once-stable bolivar was selling around 4.25 to 4.50 to the dollar on the free market at midweek, as a hastily conceived system of controls on dollar sales got off to a slow start. Caracas observers estimated that the free bolivar would settle down about four to the dollar, compared with the official rate of 3.35 to the dollar.

The controls, imposed last week, are aimed mainly at curbing the flight of capital. The central bank will sell dollars for virtually all other requirements, including servicing and repatriation of foreign investment. But non-interest-bearing deposits in the central bank of 20% to 40% of the value of imports are required to guarantee the legitimacy of dollar purchases to pay for imports.

Venezuela's reserves are down to \$500-million, with a heavy seasonal outflow in prospect at yearend. The nation's dollar deficit has averaged \$300-million annually

for the past three years.

Reserves have dwindled because the inflow of foreign capital, which normally compensates for the exchange deficit, has fallen off sharply. Oil investment is off because of high taxes, while non-oil investors are afraid of political instability.



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HOUDAILLE

one of North America's fastest growing corporations

GINO GASTALDI, managing director of Necchi, considers the world his market for sewing machines.

GIORGIO VALERIO heads Milan's huge utility, Edison S. A., which has expanded into mining, chemicals.



LUIGI INNOCENTI, son of founder of Milan's Innocenti machine works, guides new car-assembly operations.

Milan Sparks I

Industrial hub of the north, Milan is spurring Italy's economic growth at home and overseas. Mainspring of this expansion is the city's new breed of imaginative, hard-working businessmen.



VITTORIO VALLETTA took over Fiat after the war, built it into a powerful, diversified company.

LEOPOLDO PIRELLI is being groomed to take over his family's Pirelli Rubber Co. of Milan.



Italy's Economic Renaissance

men you see in these pictures.

S

From their offices in that ancient city, they have engineered an industrial renaissance that has thrust Italian names-Olivetti and Necchi are just two-into households and company headquarters around the world. They are corporate managers.

Fifteen years ago, out of war's rust and wreckage, they began reshaping the business empires that dominate Italy's economy today. Eschewing the torpor

The story of Milan begins with the that grips much of Italy, they built reputations for drive, long hours. impatience

• Metamorphosis-Almost immediately, Milan felt their impact. The city took on a sense of urgency, of bustle. Today, their imprint is deepening. Workmen are smashing down old buildings to make way for skyscrapers, and burrowing beneath Milan's ancient streets to implant a subway. A new business center, costing a quarter of a billion dollars, is going up in central Milan. Throughout the city, the sound of jackhammers reverberates.

Still, the city retains an Italianesque flavor. In the shadow of glistening new buildings, tourists visit old cathedrals and ruins. Dodging wild traffic-some 500,000 cars throng Milan's streetsvisitors stream into restaurants.

Milan is still second in Italy after Rome-which has the seat of government, the Vatican, and the languor that makes tourists want to return. But Milan is Italy's undisputed capital of



ENRICO MATTEI, controversial boss of the state oil and gas giant, ENI, has put Italy on the world oil map.

UGO GALASSI and Giuseppe Pero both climbed management ladder. Galassi heads U. S.' Olivetti-Underwood; Pero, Italy's Olivetti.



COUNT CARLO FAINA, aristocratic head of Montecatini, Milan's chemical giant, rose through the ranks.



FRANCO MARINOTTI, boss of Snia Viscosa, Milan synthetic fibers maker, stresses creativity in industry.

commerce, industry, finance. It dominates North Italy's "iron triangle"—Milan-Genoa-Turin, whose modern plants pour out cars, typewriters, aircraft, sewing machines, boilers, turbines, books, and motor scooters.

Italy is a divided country. Its underdeveloped south is poor. Even with tax inducements, the government has a hard time getting industry to set up there; labor is largely unskilled, roads are bad, the outlook grim.

I. Center of Prosperity

Milan's prosperity shows up dramatically in the statistical columns. With only 5% of Italy's 50-million people, Milan contributes 20% of the gross national product, 26% of the national tax revenue, and 40% of Italy's exports of machinery and industrial products.

Furthermore, Milan's business elite does not siphon all the prosperity at the top. Where Italy's national average take-home pay is \$2.50 daily, Milan's 1-million industrial workers average \$3.50. To cash in on Milan's boom, immigrants come from all over Italy; two-thirds of the metropolitan population were born in other towns and

• Partners in Prosperity—Although Milan's industry as a whole is dominated by private enterprise, big state-owned companies play an important role. In fact, the country's biggest economic unit is the state's Italian Reconstruction Institute (IRI), a mammoth holding company that Mussolini put together during the depression of the 1930s. IRI's companies sell more than \$1.6-billion worth of goods yearly. The other big state outfit is Ente Nazionale Idrocarburi (ENI), an expanding national oil and gas combine, with headquarters in Milan.

The corporate managers behind Italy's self-styled "economic miracle" are no more than a handful. Most of them are self-made men who have been around a long time, climbing ladders to the top or building up their own companies. Men who inherited the reins of business from their fathers are still around, but there are fewer of

11. Men Behind the "Miracle"

To sewing machine manufacturers outside Italy, the name Gino Gastaldi should be well known—if not anathema. As managing director of Necchi, he considers the world his market for sewing machines. More than half of Necchi's production is exported. Although the Necchi family still owns most of the company's shares, Gastaldi has run it for 30 years. He started working for Necchi at 16.

Giorgio Valerio manages Italy's largest company, Edison S. A. of Milan (fixed assets: \$1.5-billion). He joined Edison fresh out of engineering school, has diversified from utilities into mining, chemicals, and is regarded as one of Italy's top financiers. Valerio lives around the corner from his office.

There's Giuseppe Pero. He became Olivetti's first nonfamily president this year, following the death of Adriano Olivetti (whose heirs own the majority of stock). After taking over Underwood last year, Olivetti expects sales to be up 50% this year.

• Aristocracy—Another up-the-ladder story is Count Carlo Faina's. Twenty-six years ago, the young aristocrat answered a Montecatini want ad. Today, he's president of the chemical giant. Annual sales run about \$500-million. Over the next four years, the company expects to invest \$320-million at home and abroad.

An industrial pioneer, Ferdinando Innocenti started with his own machine shop 50 years ago, today owns the sprawling Innocenti works on the east side of Milan. He manufactures heavy mechanical equipment, is assembling British cars this year under license. Innocenti's son, Luigi, is being groomed to take his futbor's place.

to take his father's place.

Another "family" executive apprenticing for leadership is Leopoldo Pirelli, whose father, Albert, is head of Pirelli Rubber Co. Pirelli's domestic sales have doubled since the war; together with overseas sales, which have quadrupled, they amount to more than \$300-million annually. Pirelli's new 32-story skyscraper in central Milan is Europe's tallest building.

• Creative Spirit—The head of Milan's big man-made fiber and plastics giant, Snia Viscosa, is Franco Marinotti, who was named president in 1930. Marinotti stresses exports. He reports that 40% of Snia's production is sold overseas. In his spare time, Marinotti paints. "Both art and industry require the spirit of creativeness" he says

of creativeness," he says.

Vittorio Valletta took over Fiat after the war, succeeding founder Giovanni Agnelli, whose family still has a large chunk of shares. Although Fiat is at Turin, it has strong Milan connections. A bouncy, hard-driving man, Valletta masterminded expansion of the warmaimed automobile complex into one of the most diversified empires in the world. Fiat produces 500,000 motor vehicles a year, plus aircraft, oil products, household appliances, and it has a finger in many other industries. Outside Italy Fiat has 15 plants.

• Maverick—Tall and dapper, Enrico Mattei is Italy's most controversial industrial magnate. As president of the state's oil and gas agency, ENI, he has plumped vigorously for nationalization



NINO CUGNASCA (right) is typical of Milan's many-sided industrialists. Head of medium-sized



company, he combines interest in cultural and political affairs with a sharp sense for business and an eye for profit-making opportunities.



MONEY matters done with early in the day, Cugnasca leaves his bank in Milan's bustling business quarter.

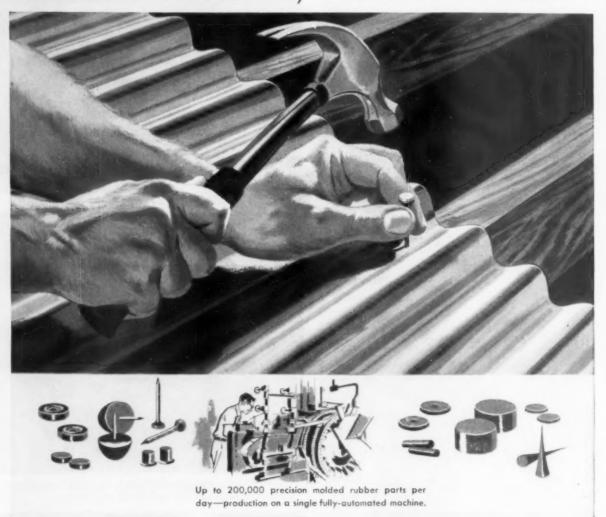


LAW OFFICE is next stop for Cugnasca, who started with father's Salbar Co. (chemicals), now has oil and other interests.



LUNCH at "Alfio," restaurant haunt of Milanese businessmen, leads to informal, friendly discussions of business deals.

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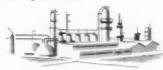
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CARLO SAMPIETRO of Mial, electronics company with plants in Italy and Latin America, inspects product in Milanese plant.

of power resources, thus earned the distrust of private enterprise. A wartime partisan (he won the U.S. Bronze Star), Mattei has parlayed the old Fascist oil agency, AGIP, into a \$2-billion empire and put Italy on the world oil map, partly by concession agreements with producer countries that have broken the traditional 50-50 division of profits.

Not all the spoils have gone to the giants. Smaller industries, too, have mushroomed, largely nourished by their sales to the mammoths. Mial, for instance, sells its electronic products to several of the largest companies. Founded by its owner, Carlo Sampietro (picture, above), in a Milan basement in 1937, Mial now boasts five plants in Italy, two in Latin America. It does \$10-million worth of business annually.

Nino Cugnasca (pictures, page 77) has expanded his father's chemicals and mining business (Salbar Co.) into oil development in Jordan and Indonesia, paper, mineral water, and other activities.

III. Hard Work and Politics

Milan's business district reflects this new energy and expansion. At luncheon time it hums with hundreds of quiet business discussions in restaurants. Milanese executives have the reputation of never wasting a minute, even during their leisurely two to three hour luncheons.

Not all businessmen conform. The Milanese have worked hard; they like to relax. Quite often, a businessman will lunch at home. He'll even take a brief rest. Furthermore, the long weekend is catching on. If a work day falls between two holidays, a businessman is very likely to "bridge" them—the

Milanese term for taking the middle day off, too.

• Boost From Abroad—That doesn't mean business in Milan is slowing down. On the contrary, virtually every corporation of any size is planning expansion. Another boost is coming from abroad, with foreign investment, licensing agreements, and the aggregation of a large foreign "colony." Already Milan has 10,000 foreign residents—including 200 American businessmen.

U.S. interest in Milan is strong. In the past three years, U.S. companies have invested \$95-million in the Milan area—almost 70% of all U.S. investment in Italy during this period. There are about 1,000 licensing agreements between U.S. and Italian corporations, mostly in chemicals, pharmaceuticals, and electronics. U.S. companies that have recently set up shop in Milan—or expanded facilities already there—are Minnesota Mining & Mfg. Co. and Link-Belt Co.

• Labor Snags—To get where they are, Milan's corporations have had to untangle some knotty problems. Just as the companies were getting on their feet, in the late 1940s, Communist-led unions began making trouble. There was violence, strikes. Eventually, moderate influences prevailed in the unions the economy began perking up, labor relations improved. There is still Communist agitation, but it gets less of a hearing; it is directed in part against laborers for spending their money on cars and refrigerators—and not on union dues.

The rivalry between Milan and Rome is expressed usually in good-natured terms. "We must work hard to make up for those in Rome who don't work at all," says one executive. But there



have been serious problems-mostly procrastination and politics.

"Sometimes we need a policy statement from the government," says one corporation official. "We ask for it. Then we wait, and wait, and wait. We cannot wait forever. So we make our own policy and ask Rome to approve it." Since private enterprise has friends in government, it often gets its way.

• Political Pressures—The question of politics is not so easily solved. There is constant pressure from the left. To meet the challenge, Italy's corporations do a bit of dabbling. Olivetti actually founded a party, the Community Movement, which now has one member in parliament. All big corporations, including Olivetti, have some voice in the affairs of the ruling Christian Democratic party.

Business exerts pressure on the government mainly through the industrial associations headed by Confindustria, Italy's NAM, which has headquarters in Rome. Of Confindustria's members, the most powerful by far is Associazione Industriale Lombarda—of Milan.

By no means is Italy's business community the soul of harmony. Over-all, however, friendly relations predominate even with the state-controlled industries, which seceded from Confindustria to form their own association, Intersind. More often than not, Intersind and Confindustria press the same arguments on government.

The only real maverick is Mattei. By pressing for state control of electric power, he excluded himself from industry's inner circles professionally and socially. He belongs to none of the tycoon clubs; he's rarely seen mixing socially with the business elite, even though his combine does a lot of trading with private enterprise.

With executives of IRI state companies, however, there are more cordial relations. State companies supply Fiat with steel, buy plastics from Montecatini, generally trade freely with private companies. When Edison can't meet the demand for power, Finelettrica comes to Edison's rescue—and vice versa.

• Big and Rough—Italy's Milan-domi-

nated economy is unabashedly monopolistic. Fiat produces 75% of Italy's cars, Edison 60% of its electricity, Pirelli 80% of rubber products, Snia Viscosa 80% of manmade fibers. Montecatini accounts for approximately 70% of chemical production.

To protect their interests, the big corporations sometimes play rough. Montecatini, for instance, once had a monopoly on synthetic fertilizers. Then Mattei's ENI and Sicedison, Edison's chemical affiliate, owned jointly with Monsanto Chemical Co., began producing them. Montecatini refused to deal with either company until a price agreement was reached. Pirelli is said to be

giving a hard time to Goodyear, whose Italian subsidiary is trying to move in on the rubber products market.

IV. Bickering in City

Besides being Italy's industrial headquarters, Milan is the country's money city. It has the biggest banks, except for Rome's Banca Nazionale del Lavoro and Banco di Roma—which would be small without their branches in Milan. Milan's Bourse accounts for nearly half of Italy's stock transactions. Milan's answer to New York's Wall Street and London's Threadneedle Street is Quartiere degli Affari.

• Growing Pains—Although Milan's \$542-million budget is Italy's only municipal budget in balance this year, it is not a city without problems. It has a \$262-million debt, for one thing. It also has leftist circles in the municipal government who want to boycott Edison and buy all their power from publicly owned AEM (Azienda Elettrica Municipalizzata). On the other side, private interests say it is time the city turned over its dairies and let a corporation handle the city's milk production.

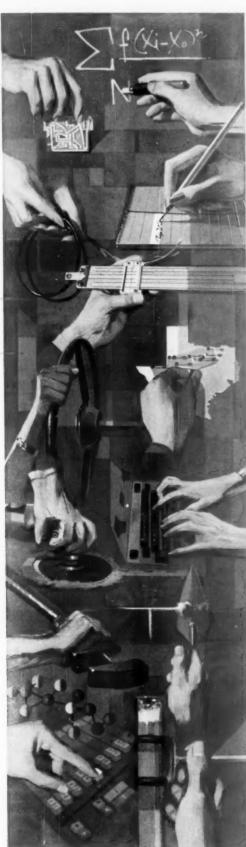
In addition to almost constant municipal bickering about ownership there is disagreement on what to do with new industry. It is growing so fast that nobody can agree where to put it. As it is, industry is forming a wide band around the city. Some say that this is good, that it forestalls a worsening of Milan's congestion. Others say urban Milan should draw more factories.

• Italy's Manhattan-Milan's new business center-the "Centro Direzionale"—is well under way, and civic pride courses through all elements of Milan's population. When completed in 1964, it will give Milan the most Manhattan-like skyline in Europe. Its 202 acres, just north of the present city center, will be studded with skyscrapers. These skyscrapers are already completed, and a fourth is inching upward. Others are blueprinted. To finance municipal construction, the city is raising \$85-million through public loans. Private companies are investing \$165-million.

When all is done, the Milanese hope, their city will be a fitting site for the capital of the European Common Market. Along with cities of other member countries, Milan has submitted its name in candidacy.

Whether or not it becomes the Common Market's capital—there's no indication when a choice will be made—Milan expects to keep on growing. "Why should we stop?" says a Milanese businessman. "We have always had a

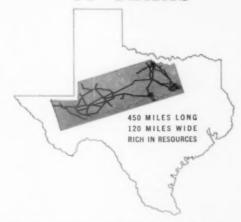
tradition of commerce and industry; now we also have a tradition of growth." END



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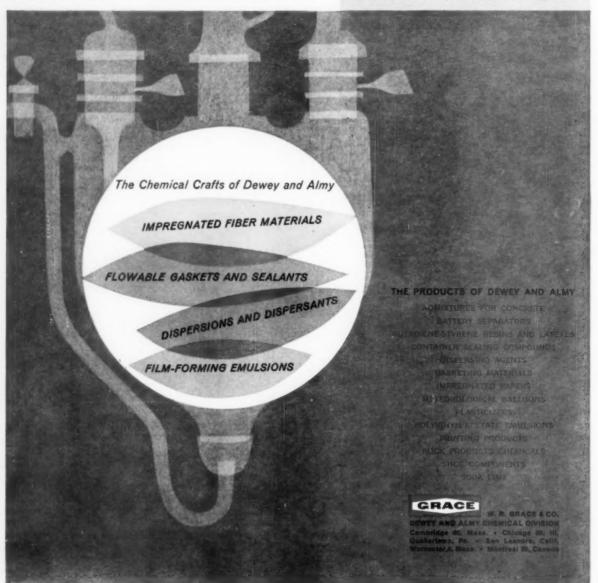
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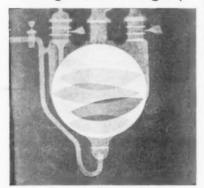


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Duties on Fabrics Boosted

Higher straight import tariff substituted for tariffquota system, giving "slight" added protection to U.S. wool and worsted textile mills.

The White House last week moved to give domestic woolen and worsted textile mills "slight" additional protection from imports of foreign fabrics, particularly low-priced goods from Italy

and Lapan

Under a seldom used provision of the General Agreement on Tariffs and Trade (GATT), the President replaced import tariff-quotas with a schedule of higher straight import duties. The new rates, which go into effect Jan. 1, are estimated to average 3% higher on fabrics valued at more than \$2-per-lb., 12% above present rates for goods valued at \$2 and below. On the cheaper items, there's a sliding flat rate, ranging up to \$1.135-per-lb.

Domestic mill spokesmen expressed satisfaction with the new protection. "Potentially more favorable," is the cautious view taken by Edwin Wilkinson, president of the National Assn. of Wool Manufacturers, "but only time

will reveal its adequacy."

• Record Rise—For several years domestic woolen producers have viewed with alarm the increasing imports of low-priced fabric. During the first eight months of 1960, imports of woolens and worsteds soared to almost 50-million sq. yd., more than any other full year. Foreign value of this influx approached \$68-million, with a duty-paid value of roughly \$86-million in U.S. markets.

Of greatest concern to domestic producers has been the recent flood of low-priced woolens from Italy. Last year, it was largely the output of Prato, a small city near Florence, that pushed Italy ahead of such giants as Britain and Japan in shipments to the U.S. market (BW-Jun.4'60,p60). Prato woolens, about half of which come from small, backyard, family-operated "artisan factories," are mostly of a very cheap grade woven from regenerated and waste woolens, and priced as low as 70¢ per square yard. The new ruling is expected to stem the flow of these goods by eliminating the quota and increasing the duty.

• Punitive Rates—The present tariffquota, imposed in 1956, has been under heavy fire from both domestic mills and foreign suppliers. It set flat tariff rates on imports up to 5% of annual domestic production, and imposed punitive percentage duties above that quota. Over-all rates average 45% on all imported woolen and worsted fabrics.

In practice, this quota works against

British and, to a degree, French manufacturers. Because the tariff rises when the quota is filled, there is a rush each year to import wool fabrics before the limit. This year, the break-point was reached in March. But British and French luxury fabrics are usually ordered specially for seasonal needs and cannot be rushed in at the beginning of the year in order to qualify for the lower tariff. That's why, when Pres. Eisenhower and Prime Minister Maemillan appeared together on British TV in the summer of 1959, the Briton raised the question which had become a factor in the British election campaign then in progress. "I wish you would do something for us on wool textiles," he remarked. Two weeks later the State Dept. agreed to renegotiate the tariff agreement. The latest ruling is the result-but it fails to satisfy the British. · Penalty Seen-J. Douglas Hood, chairman of Britain's National Wool Export Corp., expressed "bitter disappointment" at the new rates. In effect, he says the new rates will penalize and restrict traditional higher-priced woolen and worsted fabrics from Britain the most, and hurt cheaper goods from Japan the least. The British have urged a country-by-country quota allocation.

"Very disrupting and disappointing," added Bernard Smith, general counsel to the American Trade Assn. for British Woolens. He believes it will prove very damaging to American companies. "The beneficiary," he said, "will not be American woolens manufacturers, but other countries such as Japan and Uruguay where labor costs are lower. The increased disparity in price will also make it increasingly difficult for American clothing manufacturers to buy quality fabrics, particularly since the men's clothing industry absorbed a 12% wage boost earlier this year. It will mean an increase in prices."

Smith urges that categories be established in inverse proportion to value—the higher the value, the lower the duty.

Spokesmen for Italian and Japanese woolen interests take a "wait and see" attitude that borders on unconcern. Arthur de Santis, assistant executive secretary of the American Chamber of Commerce for Trade With Italy, Inc., claims importers of Italian quality fabrics are "more or less satisfied." Importers of Italian low-priced goods, however, are very unhappy, although they have been expecting action along these lines for some time. END

reduced prices make it even thriftier!

'61 CHEVY CORVAIR

Keeping costs down is a fine art with most businesses—and nobody's more aware of it than Chevrolet. Which is why we've come up with some important news about Corvair for 1961.

To begin with, prices have been reduced on all coupes and sedans. (Your dealer will be glad to tell you exactly how much.) Enough said.

What's more, a new rear axle ratio, quicker-than-ever coldstart warmup and other improvements help make Corvair a more practical buy than ever.



Under the hood, you'll find nearly 12% more cargo capacity, too. Along with all of the refinements you'll enjoy in the '61 Corvair, you'll appreciate the traditional virtues that have become a trademark with us: that air-cooled rear engine (never needs antifreeze), the traction, the nimble handling that makes driving easier.

Give Corvair a chance to show you what it can do for your balance sheet. Your Chevrolet dealer's the man to see. (And by the way, you might well be interested in Corvair's wagons—the Lakewood and the intriguing Greenbrier. Check them both out while you're getting the short, sweet details about Corvair economy at your dealer's.)... Chevrolet Division of General Motors, Detroit 2, Michigan.







In Labor

New Democratic Administration Means Hoffa's Troubles Aren't Over Yet

The end of the court-ordered monitorship over the International Brotherhood of Teamsters may be in sight (BW-Nov.5'60,p134), but James R. Hoffa and other IBT leaders still have troubles ahead.

The election of Sen. John F. Kennedy to the Presidency and the reelection of Sen. John L. McClellan (D-Ark.) can be interpreted in that way. Both men have said—flatly—that new steps should be taken to make sure that IBT has cleared itself of racketeering and corruption.

Sen. McClellan recently announced that a Senate investigation of labor racketeering would be resumed after the election, with "Hoffa's union . . . involved." He said that hearings will be held on (1) the manipulation of union charters—the buying and selling of locals, and (2) other areas of racketeering and corruption.

Teamsters to Boycott Washington Apples In Three-Month-Old Warehouse Strike

The International Brotherhood of Teamsters plans a nationwide boycott of Washington apples in a three-month strike against 26 employers operating 33 fruit warehouses in the Yakima Valley, a major apple producing area. But IBT has a problem: It has signed at least one warehouse contract so there's a need to distinguish union-contract apples from "struck" apples.

The Teamsters' Local 760 in Yakima struck Aug. 27 in a contract dispute over a union shop, wages and other issues. The employers complain that the labor dispute "centers around compulsory unionism demands

more than wages and work conditions."

When the dispute dragged on, deadlocked, IBT announced plans for a boycott of Washington apples, to start in the Los Angeles area—a big market for the apples. Heber C. Thompson, of Cowiche, Wash., president of the Washington State Farm Bureau, denounced the boycott as "a rule or wreck tactic" and "a brazen attempt to apply an economic stranglehold on one segment of the industry not directly involved in the situation in order to force the union's domination of another segment."

Thompson says that the squeeze is being applied on the apple grower to force union demands on handling

and storage firms.

Deferred Raise Boosts for Next Year Average 8.2¢ per Hour, Study Shows

Wage increases that will become effective next year under long-term contracts average 8.2ϕ an hour, according to an analysis by the Bureau of National Affairs, Inc., a private organization for gathering business news. BNA

MORE NEWS ABOUT LABOR ON:

- P. 88-How labor views the election.
- P. 90-Rail strike threat in Canada.
- P. 93—Goodyear says plant remodeling depends on better output.
- P. 94—How hourly wages have risen since 1947.

reported a comparable figure for 1960 was just under 8¢.

In manufacturing alone, the average deferred increase is 7.44 an hour.

BNA reported that construction, communications, and utilities raises payable in 1961 are the highest scheduled, a substantial number above 10¢ an hour. The smallest increases are in aircraft, apparel, leather, paper, petroleum, rubber, textiles, and services.

Rarick Will Try Again to Wrest Steel Union Post From McDonald

Donald C. Rarick, leader of an insurgent faction within the United Steelworkers, announced this week that he will try again to wrest the USW presidency from David J. McDonald. Rarick announced his candidacy in letters to the Union's 3,000 locals.

Rarick criticized McDonald's leadership and the settlement after nine months of steel bargaining in 1959.

In order to be nominated, Rarick must have the support of 40 USW locals. The quadrennial election—by referendum—will be on Feb. 14.

Rarick shocked the McDonald forces in 1957 by polling 223,516 votes as a newcomer to the USW's national political scene, to McDonald's 404,172. Although the protest movement has continued since, Rarick has shown no apreciable gains in support through local union elections in the past year.

IUE Shuns Wage Reopening, Will Let Each GE Local Opt on Benefits

The strike-ending agreement between the General Electric Co. and International Union of Electrical Workers provided that within 30 days the union could choose one of three alternatives for 1962—a 4% raise, 3% plus an extra holiday and added vacation time for 25-year employees, or a wage reopening.

Last week IUE's GE Conference decided against the uncertainty of a reopening; it elected to allow each local

to decide between the two other options.

A union official said that newer GE plants have few, if any, workers with 25-year seniority; locals in these may elect to take the straight 4% increase. Some of the older plants, particularly in the Northeast, have large numbers of long-seniority workers who may prefer a little less money and more time off.

How Labor Views the Election

Generally, there's enthusiasm for the Presidential outcome and chagrin over setbacks in the House. Labor leaders are confident of greater entree to the White House, but they aren't sure how much greater.

Organized labor backed Sen. John F. Kennedy and other Democrats with big money and manpower. Now its leaders know the unions helped—in some states were crucial—in electing a friendly Administration and a Democratic Congress.

In an unusual display of understatement, the weekly AFL-CIO News commented editorially this week that wherever Kennedy won big city majorities there appears to have been a relationship between the vote and labor's "major campaign effort . . . registration and get-out-the-vote campaigns."

In return for its help, labor hopes for White House support that will reverse the setbacks that unions received during the Eisenhower years. But there is a nagging doubt that labor will get allor even a substantial part—of what it

wants.

• How Friendly?—Labor leaders expect that Kennedy will be friendly and sympathetic, but they admit a disturbing doubt of just what or how much he is going to do for labor. "Kennedy's not going to give us everything we want—we know that," says one union president. Another predicts: "The honeymoon with labor will be over in

two years."

Union officials say the door to the White House may not be wide open to labor but it will be "at least ajar, not closed tight as it has been." They don't expect to be accepted as openly as they were by Pres. Harry S. Truman, but they don't expect to be shut out as they complain they have been since.

• Setback in House—Labor is less happy about its showing in the Congressional races than in the Presidential election. It accomplished less than it hoped it would—even, if you do some fine figuring, less than it did in 1956 or 1958. The next Congress isn't likely to be more pro-labor than the 86th Congress; on paper, it appears likely to be more conservative.

Union political organizations backed 30 candidates for the Senate, and 18 won; they supported 337 for the House, and 187 came out on top. This isn't encouraging for unionists who worked hard for sweeping victories as balm for the sharp sting from the "friendly" 86th Congress that passed the Landrum-Griffin labor reform law last year.

Their big hope now is that Kennedy

as President will influence the new 87th Congress sufficiently on labor matters to make it a better one—from the union viewpoint—than the 86th Congress.

• Blame White House—AFL-CIO lobbyists complain that they lost their legislative battles in the past not just because of a coalition of Republicans and conservative Democrats but also because of the maneuvering of the Republican White House. The open threat of a veto took momentum out of campaigns for labor supported legislation, the lobbyists say.

They cite particularly labor's defeat in its drive for a \$1.25-an-hour minimum wage. The President called for no more than a \$1.15-minimum, and the campaign ended in a stalemate.

Moreover, they blame the passage of the Landrum-Griffin bill on the intervention of Pres. Eisenhower, through a nationwide television appeal for the reform law two days before it was finally approved.

• Kennedy Record—As chairman of the Senate labor subcommittee in the last Congress, Kennedy worked with the unions in their three major areas of interest: for the \$1.25-minimum wage, for a bill to remove curbs on construction site picketing, and for less restrictive amendments in the Landrum-Griffin bill.

Kennedy was unsuccessful in all three areas. Labor expects him as President to follow through—more successfully—on the legislative goals left over from the 86th Congress. Unionists predict that Kennedy will pick up support in the new Congress from liberal Republicans who stuck with Eisenhower before.

But the coalition that beat labor before remains not only intact but even strengthened. The new Senate may vote again for the liberal legislation that it passed before; the House may continue to block it, with 22 more Republicans than it had before.

 Chief Issues—Unions are concerned about such tough issues as automation and its effect on employment; state right-to-work laws; national emergency strikes and Taft-Hartley rules to govern them, and the Landrum-Griffin

Kennedy has spoken out on all of these:

· On automation, he'll call a na-

tional conference of union, business, and government experts—an AFL-CIO goal. However, he opposes the idea of shortening the work week, another labor aim in relieving the unemployment effects of automation.

 He opposes state right-to-work laws and would amend Taft-Hartley to

outlaw them.

On Landrum-Griffin, which the unions want to start repealing, he urges caution before seeking changes.
 Administrative Power-Under the Eisenhower Administration, appointments to federal labor agencies have become more important than ever. The Secretary of Labor, for instance, now has power under the far-reaching Landrum-Griffin Act to void even union elections.

While union leaders have cited Mitchell as their best friend in the Eisenhower Administration, many of them are anxious to see power in the hands of a Democratic Secretary of Labor.

Another union target is the National Labor Relations Board, now composed of five Eisenhower appointees. Labor specialists have continually charged that the board is pro-management in interpreting Taft-Hartley regulations.

Since NLRB memberships are by Presidential appointment for five-year terms, a Kennedy Administration cannot immediately overhaul the agency personnel. However, Kennedy can make one appointment immediately, since member Arthur A. Kimball serves under a recess appointment. Next August, the term of Joseph A. Jenkins expires, giving the Kennedy Administration a second voice on the board.

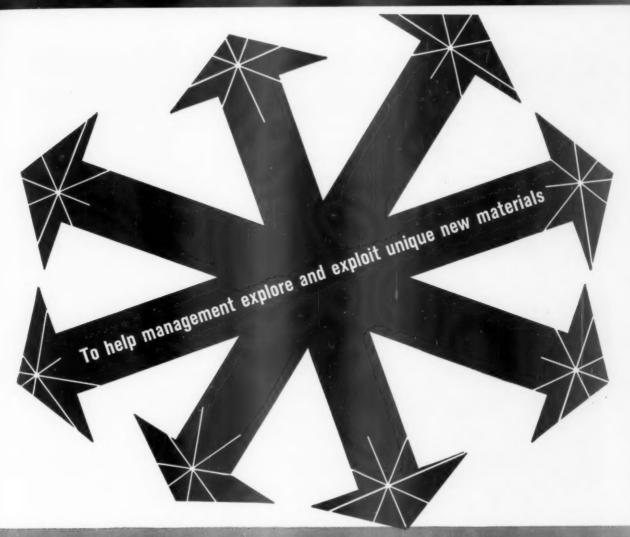
This may be enough, union leaders believe, to change the board's outlook more in line with their wishes.

• Bargaining Impact—Before the Eisenhower Administration moved into Washington, it made clear that it would follow a "hands off" policy in bargaining disputes. Although government pressures—through Vice-Pres, Richard Nixon and Labor Secy. Mitchell—helped settle the long and costly steel dispute last year, the Administration has kept out of labor-management arguments.

Kennedy is expected to take a different position; under him, the government undoubtedly will take a more

active role in disputes.

The possibility of White House intervention could—and probably will—make unions bargain more militantly, beginning in the auto industry in 1961. Labor believes that the incoming Administration will be friendlier to it than to management. END

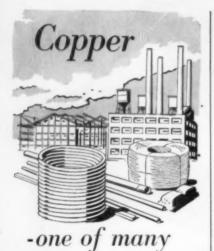


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Rail Strike Threat in Canada

Diefenbaker may press for compulsory arbitration law to cover disputes that threaten public interest.

Compulsory arbitration-anathema to labor and of mixed appeal to management-may become part of Canadian law if 15 nonoperating unions go through with plans for a Canada-wide railroad strike.

The proposed statute would enable the government to impose compulsory arbitration if it believed a threatened strike imperiled the national well-being. Sources close to Prime Minister John Diefenbaker say that he is thinking seriously of introducing it at the present Parliamentary session, which opened this week. In view of the overwhelming Conservative majority in the House of Commons, few doubt that he could get it passed.

The threatened walkout would be the fourth Canadian railroad strike since 1950, the third since 1957

· Pav Increase-At issue is a three-stage pay raise totaling 14¢ an hour. The formula was recommended in August by a federal conciliation board and rejected by the giant Canadian Pacific and Canadian National Systems, which estimate that it would cost them \$35million annually after 1961.

The government has asked the unions to hold off on their demands until spring, when a royal commission on transportation problems is due to issue its findings-including, the railroads hope, a recommendation for higher statutory export grain rates.

The 111,000-member unions have replied in effect, "Nothing doing. We want our raise now." A strike vote backed walkout plans by a strong majority. Frank Hall, Canadian vice-president of the railway clerks' union and chief negotiator for the group, is expected to announce shortly that the strike has been scheduled for Dec. 4.

• Existing Powers-It is widely assumed that the government will not permit another railway strike to take place. A compulsory arbitration law is one means of stopping it. At present it is the means that Diefenbaker appears to favor despite the misgivings of some members of his cabinet. These men feel that a law so violently opposed by the unions would inject unneeded bitterness into an already tense situation and into the whole area of labor-management relations. They also point out that compulsory arbitration is already available on an ad hoc basis.

Twice before, the Canadian government has used compulsory arbitration



IOHN DIEFENBAKER

in railroad disputes-to cut short a strike in 1950 and to head one off in 1954. It was enabled to do so by passage of special laws authorizing arbitration in each specific case. It could do this again.

The difference between this procedure and the one envisioned in the compulsory arbitration law is that the law would make it unnecessary for Parliament to act in each case. The government would have the right to order arbitration whenever it felt that a strike threat to an essential industry ran counter to the national interest.

This permanent right in the hands of a single man rouses the unions to fury. If they must have compulsory arbitration at all (and they're far from enthusiastic about it on any terms), they'd prefer that Parliament made the decisions regarding which situations require it and that the decisions were made on an emergency, once-in-a-lifetime basis.

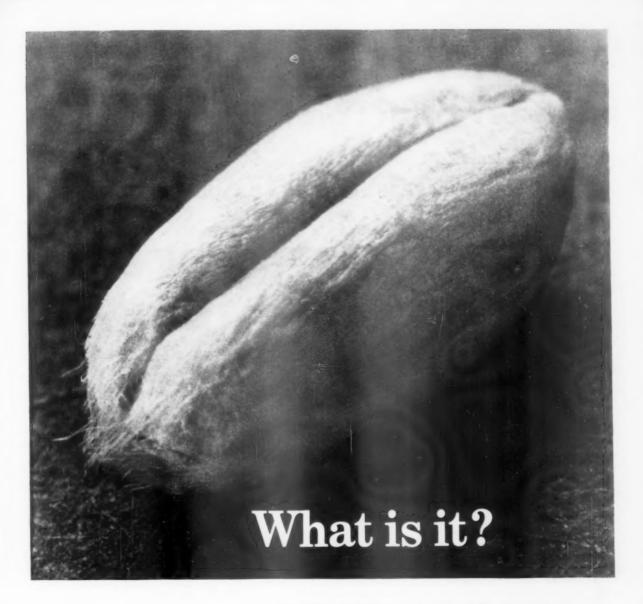
The law's proponents feel that this arrangement is too clumsy. They recall that Parliament had to be called into special session to authorize compulsory arbitration in the 1950 strike.

· Subsidy-Another proposed move is for the government to pay the railroads a subsidy equal to the cost of the raise.

Whatever he chooses to do, Diefenbaker must do it quickly if it is to stop the strike before it starts.

According to the Railway Assn. of Canada, the railroads covered the cost of previous pay increases and other expenses by jacking up shipping rates 20% in 1950, 17% in 1952, 7% in 1953, 11% in 1957, and 17% in 1958. Traffic declined as a result.

Now they feel they've come to the end of the line as far as blanket freight



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rate increases are concerned. Evidently so does the Canadian government, which froze rates last year.

 Competition—At the same time, competition from highway and water carriers has mounted. The railroads have attempted to improve their position by installing money-saving equipment, improving freight service and—as in the U.S.—reducing passenger service.

Now they must have changes in the

statutory freight rates on export grain shipped from the prairie provinces, the railroads told the royal commission. At present, they represent a \$70-million annual subsidy from the railroads to western farmers, the railroads contend.

Plant Remodeling Up to Workers

Goodyear is willing to spend \$10-million to modernize a high-cost tire plant in Akron but it wants assurance that workers there will meet production standards of other areas.

Early next year, Goodyear Tire & Rubber Co. will decide whether to go ahead with a proposed \$10-million modernization of one of its old tire plants in Akron—or to prepare to shift its production to a new plant elsewhere. The company already has concluded that it cannot continue to operate the 42-year-old plant, with its high production costs, in today's competitive tire market.

The success of any modernization program will hinge on whether Goodyear gets cooperation from rubber work-

ers in boosting productivity.

Common Problem—Goodyear's problems are typical of those of companies with old, tightly unionized plants. Today's high operating costs, in which wages and expensively packaged fringes are big items, compel many employers to rehabilitate and modernize plants, install new equipment, and otherwise seek more efficiency.

They are finding that the surest solution for the problems of a competitive market is more production at a lower

unit cost.

However, increased operating efficiency cannot be accomplished easily. Union contracts limit the rights of employers in many areas. Employers are acutely aware that there is nothing to be gained by investing in plant modernization and new machinery unless production is going to go up, costs drop.

Electric Autolite Co. recently considered a similar question of investing in plant modernization and consolidation in Toledo or shifting production elsewhere. As a result of its decision (BW-Nov.12'60.p128), Autolite factory operations will be moved from Toledo—at a cost of 1,800 jobs—by the end of 1961, to a new plant in Decatur, Ala., and a modernized factory in Bay City, Mich., where workers gave assurances of greater production effort.

• Now It's Goodyear—Goodyear, too, put the question of the future of its big Akron Plant 2 directly before employees. It asked the plant's 1,450 production workers for assurances that modern tirebuilding equipment would be operated in a rebuilt Akron plant with the same efficiency as in a new plant elsewhere.

Up to now, production efficiency in Plant 2—which builds passenger tires—is far below what the company considers par for the Goodyear system. Part of this can be attributed to the limitations of the old plant and to outmoded equipment.

Other recognized factors include the six-hour day in Akron rubber plants and production limitations imposed by labor. Outside Akron, rubber workers put in eight hours a day, and there are fewer restrictive work practices.

• Company Messages—Goodvear did not mention these factors in presenting its case at 33 employee meetings in four days. Walter H. Rudder, manager of domestic tire production, merely pointed out that Plant 2 is by far the highest-cost passenger tire plant in the Goodyear domestic organization and that production cannot continue there much longer on the existing cost basis.

Rudder told employees that, because of the competitive situation in the tire industry today, Goodyear must place its production in its most efficient plants. He added that the company is willing to spend millions to keep the production in Akron, if workers will cooperate.

To make the Akron Plant 2 competitive, Rudder said, Goodyear engineers have recommended extensive modernization over several years—to include the consolidation of production on three floors instead of five, with a new and efficient factory layout and the most modern equipment.

 Up to Employees—What Goodyear wants from employees is assurances that they will "comply with production output standards that are being met elsewhere," Rudder told plant employees in half-hour meetings on company time.

More effort would be required but, Rudder said, workers are being asked only to accept "standards and production performance that are perfectly reasonable—that are a matter of routine not only in our outside plants but also in our competitors' operations."

Goodyear feels that the efficiency of new tire-building machines will depend largely on their acceptance by the men who operate them. Designed and built by Goodyear, the machinery and equipment are considered a long stride in the improvement of tire quality and the stepping-up of tire production.

• On Trial—Some of the new equipment has been installed on a trial basis. Goodyear is watching its performance closely, as a test of what might be expected if the entire rehabilitation program is put into effect. In particular, it is interested in employee reaction.

"If we find that we cannot get the performance on this equipment in Plant 2 that we get on the same equipment elsewhere, then certainly there will be no sense in spending the millions of dollars it will take to modernize the plant." Rudder said bluntly.

This was about the extent of a warning to workers by Rudder in his eightminute talk, carefully phrased to present Goodyear's problem and proposed solution. To make sure of getting the fullest consideration, the company sent copies of the talk to all employees' homes.

• URW Forewarned—The United Rubber Workers has the Plant 2 contract. It was notified, well in advance, that the company planned to ask employees for help. Union officials were given copies of the address Rudder planned to make and were invited to sit in on any—or all—of the meetings.

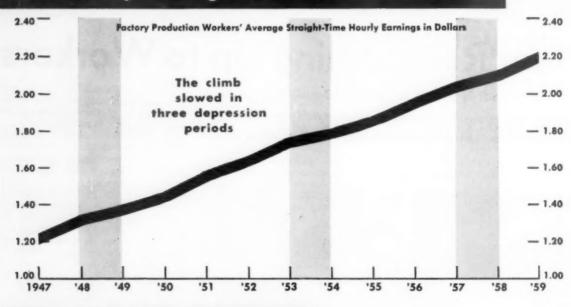
So far, URW has shown no opposition to the company's proposals. This doesn't mean that there will be no union opposition. It's early yet, labor officials say, URW's position probably will await a local membership meeting on the Goodyear proposals.

However, the union position is likely to be more amenable to changes than would have been probable a few years ago. Akron has been losing ground steadily as the rubber industry has expanded into other areas—decentralizing production and getting closer to its marketing areas.

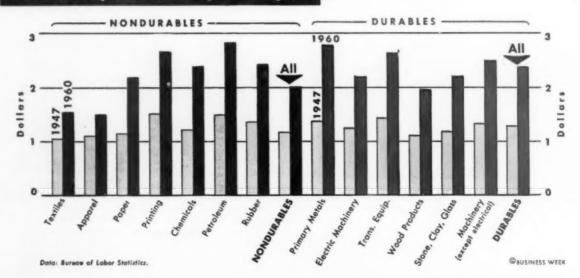
This is reflected in the number of clock-card workers in the six tire company plants in Akron—down from 38,000 in 1950 to 29,000 in recent months. Although Goodyear's output is substantially higher on a companywide basis than it was 10 years ago, its production in Akron is down 19%.

Undoubtedly, these factors will be important in the union's decision—or more importantly in Plant 2 unionists' decisions—on Goodyear's request for assurances of increased production. END

How Hourly Earnings Have Risen Since 1947 . . .



... In Major Industry Groups



Rise Is Steeper for Hardgoods

Straight-time hourly earnings have fattened the pay envelopes of factory workers steadily since 1947—with the average increase from \$1.24 to \$2.22 mounting up to about 80% (chart). Adjusted for rises in living costs over the past dozen years, the production workers' pay gives roughly 40% more buying power than workers had at the end of World War II.

This is a standard measurement of gains made by workers. However, there

is a growing recognition—and complaint—that it is a partial measurement only. It doesn't take into consideration fringes and pay for time not actually worked. Nevertheless, the movement of straight-time hourly earnings remains the accepted guide.

 Uneven Spread—The latest figures on straight-time gains are contained in a new study, recently released by the Dept. of Labor, of earnings in the period from 1947 through 1959. It confirmed what everyone has known: Earnings have risen steadily—more slowly at times, but with no interruption of gains.

The increases weren't spaced evenly. The gap between low-wage and high-wage industries widened. Workers in hardgoods industries (metals, autos, machinery, and the like) gained more than those in textiles, apparel, and other softgoods lines.

Average weekly earnings in 1959 ranged from \$55.63 in the apparel in-

What a heel!

Achilles' mother was sure she had outfitted her fabled fighting son in the best of armor. She had ordered Washington Steel's ColorRold Stainless specifically for this critical purpose. No soldier in the Trojan War had been so carefully prepared for battle. But she made one fatal mistake. In fabricating the suit of armor she ran out of stainless steel and had to substitute a less noble metal for Achilles' right ankle. Paris, getting wind of this substitution, took dead aim at Achilles' heel, and down he went—not more than twenty minutes after this picture was taken.



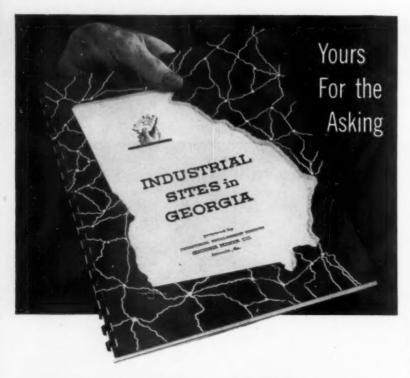
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dustry, the lowest-paid with a \$1.52 hourly earnings rate, to \$117.38 in the petroleum industry, the highest-paid with a \$2.87 rate in 1959.

According to the government's study, the textile industry was at the bottom of the list in 1947, with the lowest average hourly earnings of a major industry—\$1.04. The petroleum industry was one of the highest in that year also, with \$1.50.

• Recession Lags—The rate of climb of average hourly earnings was steady during most of the 1947-59 period, although it slowed three times—during recession years. Gains continued in these years, nevertheless: 5¢ in 1948-49; 4¢ in 1953-54, and 6¢ in 1957-58.

Irving Stern and Herman Travis, Labor Dept. economists who made the study, commented:

"One of the factors exerting an upward push on hourly earnings—even during recessions—has been the institution of automatic wage increases."

In long-term contracts with deferred wage increases, average hourly earnings continued to rise annually, regardless of business levels. Employers, critical of this, have been pressing in major bargaining for an end of automatic increases in pay at annual intervals (BW—Nov.12'60.p115).

• Rate of Rise—On a percentage basis, the rate of increase in the buving power of factory workers has been faster during the past dozen years than in the previous 33 years from 1914 to 1947–2.7% against 2.3%.

• Wages Only—The study prepared by Stern and Travis was limited to straight-time hourly earnings: it did not cover such other gains as pensions, jobless benefits, medical insurance, and various additional "fringe" benefits that increased sharply during the 1947-59 period.

The economists reported substantial increases for workers in these areas but did not place a value on the gains.

A study just released by Prof. Albert Rees of the University of Chicago, sponsored by the National Bureau of Economic Research, has criticized the omission of fringe benefits and pay for time not actually worked—for paid holidays and vacations, as an example—in any statistical analysis of the extent to which wages have been rising.

"Average hourly earnings in all manufacturing" can't be used as an accurate measure of workers' gains without taking other factors into consideration, too, Prof. Rees said.

The Chicago professor said that the average wage supplement in 1929 was just under ½e an hour, for insurance, private pension plans, and other welfare programs. In 1957, he said, the average was 18.5e an hour without counting in pay for time not worked, holidays, vacations, and so forth. END



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Tight Financial Controls Are Key

In 1956, Westinghouse Electric Corp. was a company with a bagful of problems. That March, it settled a knockdown, dragout strike that had lasted for 156 days—a contender for the dubious distinction of the longest national strike in modern corporate history. Profits had slipped almost to the vanishing point; cash was draining out of the company till at what company officials now admit was an "alarming" rate.

Westinghouse, moveover, had only that year switched to the last-in first-out (LIFO) method of inventory accounting. This had the effect of knocking off about \$12-million in paper profits, after tax, from the company's profit and loss statement. The result was that on sales of \$1.5-billion, net income was only \$3.5-million—only 10¢ a share on the company's 16.7-million shares then outstanding

Since then, Westinghouse has been through a complete and successful overhaul. Sales have climbed to an annual 52-billion rate where, for the present, they have stabilized. More important, profits, despite the stable sales plateau, have increased steadily—1959's net was

\$86-million (\$4.86 a share on 17.3-million shares outstanding), the best year Westinghouse has ever had by a tidy margin. This year, when industry as a whole is moaning about the drop in profits, Westinghouse should chalk up another record.

• Financial Key—In a company as large and complex as Westinghouse—its 29 divisions turn out over 250 basic product lines—no single factor can get the credit for this transformation. But in the past four years there have been some notable innovations in the Westinghouse financial management. These innovations, even some of its toughest competitors say, have probably had more to do with the company's new success than anything else.

For while the profit margins of the electrical equipment industry have been steady or declining since 1956 (chart), the trend of the Westinghouse profit margin has been upward—from 1.98% in the last quarter of 1956 to 8.31% in 1960's third quarter.

1960's third quarter.

In the past year, Westinghouse also has shown a smaller decline in its pretax profit margin than the industry as a whole. Its third-quarter 1960 profit

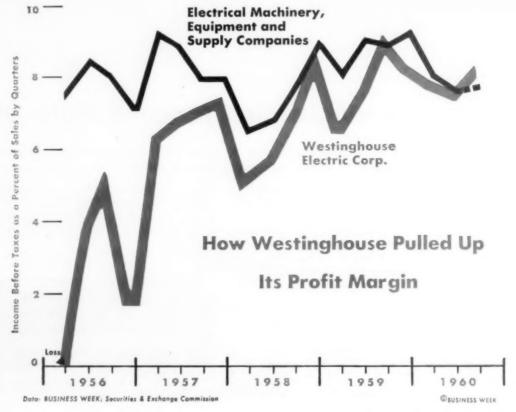
margin was below the third-quarter 1959 figure, even though it had climbed above 1960's second quarter; but Westinghouse fought the year-to-year downtrend better than General Electric, its larger competitor. GE's profit margin dropped from 13.8% in third-quarter 1959 to 10.4% in the third quarter of this year. True, GE still earns substantially more on each dollar of sales than Westinghouse, but the gap is narrowing.

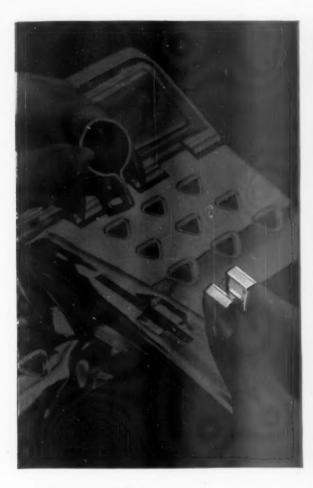
• "Profit Planning"—Far and away the

 "Profit Planning"—Far and away the most important financial step Westinghouse has taken is the new system of financial controls. For want of a better term, Westinghouse people call it "profit planning."

There's nothing new or exciting about the fact that the management of a big company is concerned about keeping costs under control, and boosting its profits. But at Westinghouse, top management has put a great deal of stress on the need to improve profit margins. And it is depending on middle management, the men who run its 29 divisions, to bring costs down.

Basically, Westinghouse has taken a number of well-established concepts in financial management—chiefly those







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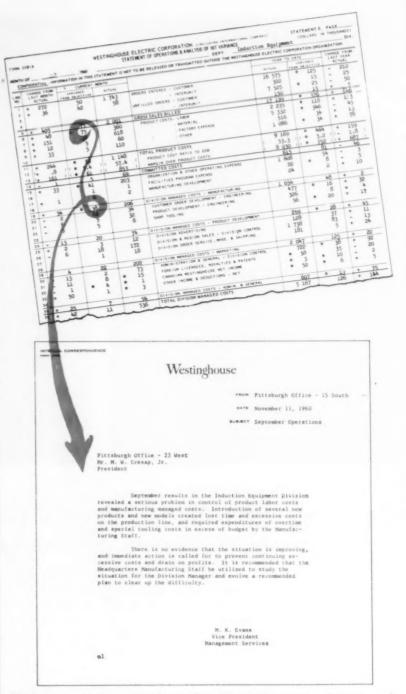
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HEART of Westinghouse financial controls is this monthly operating statement, out by 10th of the next month. Vice-Pres. M. K. Evans highlights trouble spots for Pres. Cresap.

centered on break-even analysis, the relationship between costs, volume, and profits—and applied them in a new way. This takes three distinct forms, which taken together set Westinghouse apart from most companies.

• It is making its divisional managers focus on the relationship of costs, volume, and profits in preparing their basic operating budgets.

 It has established a sophisticated system for reporting to top management. Reports don't stop with group or executive vice-presidents—normal operating procedure in many companies.

 Its whole controls system gets top management sponsorship.

• Top Priority—At Westinghouse, profit planning is known as "Cresap's



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Name-Address baby," and Mark W. Cresap, Jr., the company's president, gives it top

priority.

As it's explained by Marshall K. Evans, vice-president and director of management services and, with Cresap, architect of profit planning: "What we've done is take ideas at least 25 years old and put them together in a new form, so that top management gets the information it needs in time to make intelligent decisions."

Evans can cite a number of times when the new Westinghouse controls plan saved time and money. A few years ago, for example, the company's steam division, which manufactures turbines, found its operating results way off from projections. The controls system spotted defects in the cost accounting system, and the division righted itself. Just a few months ago, the company missed the mark on a big consumer product line—sales just weren't matching up with expectations, and inventory was piling up. The controls system found the trouble six months before the company normally would have spotted it.

• Change of Goals—This emphasis on cost control has led to a basic shift in company thinking, away from a stress on sales volume to a stress on profits—and on rate of return. "I got tired," says Cresap, "of tooling up for sales that never materialized. That's what I call mannanism—tomorrow's sales are going to double and everything will be rosy. Only trouble is that tomorrow never gets here. I want results today."

This new orientation toward rate of return is gaining in other corporations as well. With profit margins under pressure in many companies, an increasing number of them are revamping their own financial control systems. To these companies, Westinghouse offers some fine guidelines.

I. Setting Up Controls

To understand how a system of financial controls operates, you first have to realize what the system can do—and what it can't do.

In simplest terms, a control system involves financial reports on operations to top management. Obviously, such a system is standard operating procedure for all companies, whether large or

small.

But there's nothing automatic about even the best control system. Management still has to take the information that the accounting department grinds out, and put it to good use. "Financial controls," says Evans, "are a management tool, and that's all. They are no substitute for good management."

What makes the difference between a routine reporting system, which can allow costs to get out of hand, and sophisticated planning is the form in which information reaches top management. Operating reports can hide trouble or they can highlight it.

 Cost Breakdown—Westinghouse divides its costs into three major categories, then focuses on those areas where costs are most easily controlled:

- Product costs that are directly affected by the level of production and sales. These include labor directly involved in manufacturing, materials, and factory costs. Obviously, as production goes up, these costs will increase, too
- Managed costs, part of what is considered in conventional terms to be "overhead expense." These include expenditures that depend on top management policy—advertising, research, development of new products and methods—and "operating overhead," such as management and supervisory costs, purchasing, quality control, industrial relations. These costs management can and should control.
- Committed costs, which Westinghouse defines as depreciation, insurance, taxes, and rental of buildings and equipment. In the short run, these costs, for all practical purposes, are fixed. And there's not much management can do to trim them.
- Core of System—With this classification, it's a simple matter to set up a detailed reporting system. One of the Westinghouse forms that embody this concept of costs appears on page 100; the figures are hypothetical, but they correspond closely to what a typical Westinghouse department makes out monthly.

The key to the system is contained in the two columns labeled "variance from objective—current month and year to date." Westinghouse has 60 "profit centers" that submit reports monthly, and not even the best manager could keep track of all of these at once.

So the Westinghouse technique of handling this problem—followed by almost all large corporations—is "management by exception": So long as a profit center is doing what it is supposed to do, it's not likely to hear from Cresap too often. But when variances crop up, it's not long before Cresap will have something to say.

To handle product lines that are losing money, Westinghouse has set up a "profit detractor club." Profit detractors are products that are losing money, or, in some cases, making less than a 5% return on investment. Each year a list of profit detractors is drawn up, and these operations get special attention from headquarters.

Sometimes, if management feels the trouble involved in putting a product line back in the black outweighs its long-term profit potential, the line is dropped. This is what happened with

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the locomotive division, and, more recently, jet engines.

But this isn't the usual method. Normally, detailed analysis of an unprofitable operation will turn up the reasons for the losses; Cresap says that, so far, each year's list of profit detractors, taken as a whole, has been back in the profit column within a year.

II. Budget Planning

Management by exception obviously places a tremendous stress on the budget that forms the basis of each manager's objective. If the budget that is finally set is unrealistic, then there's not much point in attacking a division manager for not meeting it. So Westinghouse goes to great pains to make sure the budget is precise.

the budget is precise.

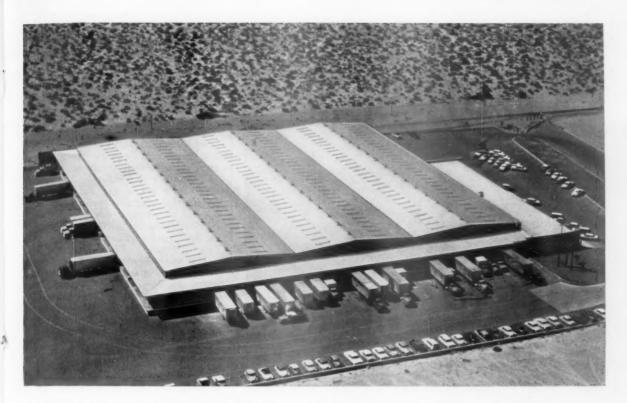
• Parts and Whole—In building the budget, the company's division managers operate almost as though they were running independent operations. Westinghouse prides itself on the degree of decentralization it has accomplished, and its division managers have a broad range of authority.

Good management, though, demands that the various parts of the company pull in the same direction, regardless of decentralization. This is accomplished through an annual meeting of division managers at Absecon, N. J., where both long- and short-range corporate goals are spelled out for middle management. Economic forecasts are given for the coming year, and Westinghouse divisions are told what management expects of them in their particular markets—refrigerators, steam turbines, radios.

The Absecon meeting comes in late January, and sets the tone for division planning for budget presentations to the top level Operations Review Committee. Divisions that have a long leadine in their products, such as steam turbines and big generators, generally are reviewed first because their forward planning is easier than, say, for consumer products such as TV sets and refrigerators, where the retail market is harder to pin down. Final budgets, though, aren't approved until December—almost a year after they are first presented.

• Target—The target that Westinghouse managers are shooting for is "an over-all rate of return of 20% on invested capital." Westinghouse admits that this is still a long way off. It hasn't produced a 20% rate of return in any year since the end of World War II, and while Westinghouse won't say what its current rate is, one executive comments "we're still off by a wide margin."

Obviously, not every division manager is expected to set a goal of 20% rate of return in making the budget. That figure would be impossibly high



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for some divisions with low profit margins and too low for highly profitable divisions. So the rate of return that Westinghouse managers are expected to select is one that will match their top

• No Rose-Colored Glasses—In making budget forecasts, moreover, Westinghouse managers can't solve their profit problems simply by projecting a healthy increase in sales. This is partly because many of the company's products, such as household appliance lines, are troubled by serious overcapacity. It's also due to a standing company rule, which grew out of the new controls system, that sales projections are to be on the conservative side. Divisional sales targets for the sales force, in fact, are discounted anywhere from 15% to 20% in corporate financial planning.

This rule, incidentally, is backed up by an incentive compensation system, which sharply penalizes divisions that fall short of budgeted targets or that let costs get out of control. Westinghouse officials admit that there's much less penalty for underguessing than over-

 Holding the Line—Once sales and profit targets are set, division managers work out methods for meeting the goals. They indicate where costs are going to be cut, where they are expected to rise.

If, for example, there's a general wage increase, as there will be next year as a result of the Westinghouse settlement with the International Union of Electrical Workers (BW-Oct.29'60,p82), the division managers have to find a way of offsetting it.

As in the monthly reporting data, emphasis is on the costs management can control—product costs and managed costs. (If a division wants to up capital spending, it has to go before a loan review committee—which focuses on profit potential.)

• Products and Profits—There's also stress on what Evans calls "upgrading the product mix" so the proportion of high-profit-margin items will increase.

A close watch is kept also on the prices that Westinghouse gets for the products it sells. Evans' department, handling management services, has devised "realized price indexes" for each of the company's product lines, as well as indexes of labor and material costs. "This helps us," he says, "in figuring out what a given change in sales volume is going to mean in terms of profits. There are plenty of opportunities to boost sales by cutting prices, but if this is going to mean that we knock profits into a cocked hat, then why bother?"

The result of this budgetary process. Westinghouse management hopes, will be a plan, evolved by division managers themselves, that satisfies them, and that they think they can follow. END

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In Finance

Cromer to Head Bank of England; Surprise Choice Is Youngest Ever

The Bank of England, the oldest of central banks, has chosen a new governor-Lord Cromer, 42, who is now

head of the United Kingdom's Treasury delegation to the U.S., and will be the youngest man ever in the post. Effective next June 30, Cromer will replace Cameron Cobbold, 56, who has been governor since 1949. Cobbold was reappointed for a five-year term in 1958, but made clear at the time that no one should serve more than 10 years.



Cromer was a surprise choice who was not among those-Sir Geoffrey Crowther, Sir Oliver Franks, Viscount Harcourt-rumored for the job. A member of the Baring family, one of Britain's merchant banking dynasties, Cromer worked in New York at J. P. Morgan & Co. (now Morgan Guaranty Trust Co.) and Kidder, Peabody & Co. before taking over as head of Baring Bros. & Co. in London. In 1959, he returned to the U.S. to head Britain's economic mission, and also served on the International Monetary Fund and the World Bank. As one British journalist put it, Cromer is of "the Kennedy vintage.

The British press paid tribute to Cobbold, who has strengthened the role of central banking during his reign and has taken steps to lift the veils of secrecy that have been traditionally associated with the Bank.

In one sense, Cromer's appointment marks a return to an old tradition-the naming of a member of one of the great banking families. Starting with Montagu Norman, the Bank has appointed men who were experienced in both government service and central banking-Cobbold, for example, joined the Bank as an adviser in 1933. In contrast, Cromer has had no central banking background, will have only six months as a part-time director before taking over.

Big Cement Companies Give Up Fight To Stave Off Adverse Tax Ruling

All the big cement companies have elected to pay higher federal income tax liabilities (totaling over \$50million) arising out of stricter interpretation of depletion allowances (BW-Jul.16'60,p80). The companies had until this week to appeal the tax ruling, but they chose to settle rather than risk even higher liabilities in an unsuccessful court battle.

Under the new interpretation, which cuts depletion

allowances back to a pre-1957 level, allowances must be computed on the value of raw materials prior to final processing, rather than on income from higher-priced finished products.

For most companies, which based earnings on finished products, the ruling means a reduction of 15% to 20% in net. There are exceptions, however: General Portland Cement, Marquette Cement Mfg, Co., and Missouri Portland Cement elected to continue showing earnings on the more conservative pre-1957 basis, so that they will have no adjustment to make. The new tax also puts a substantial dent in the cash position of companies, but only one or two will have to do long-term borrowing to meet the cost.

Hirshhorn, Uranium Promoter, Sells His Interest in Rio Tinto of Canada

I. H. "Joe" Hirshhorn, the Brooklyn promoter who brought in North America's largest uranium strike, the Blind River field in Ontario (BW-Jan.760,p29), bowed out of Rio Tinto Mining Co. of Canada this week. The blunt-spoken 61-year-old financier sold his interest to Rio Tinto Co., Ltd., the big British outfit that merged its properties with Hirshhorn's in 1956 to climax the Canadian uranium boom. Neither side would discuss terms, but Toronto brokers feel Hirshhorn's holdings brought him about \$10-million to \$13-million.

Hirshhorn's explanation: "I'm tired." But the sale also brings Rio Tinto Ltd. closer to taking over the whole Blind River area. Rio Tinto reports it now holds more than 80% of the Canadian company, which has eight of

the 11 mines in Blind River.

Next step if Rio Tinto were to take over the whole Blind River field would be acquisition of Denison Mines, Ltd. Denison has been wrestling with some financial problems but rumors are that so far it has declined acquisition offers by Rio Tinto.

Finance Companies Face Profits Cut

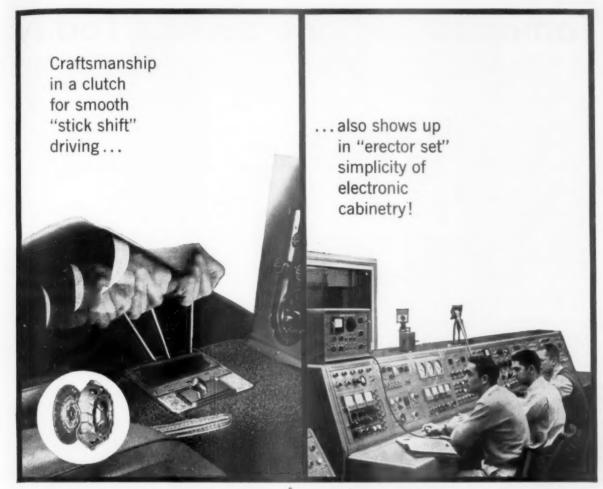
The success of the compact car has had a sharp and unfavorable impact on the nation's smaller sales finance companies-and some of the big ones as well. For one thing, operating costs are going up; net profits of finance companies slipped in the first half to 8.4% of gross income, compared with 10.3% a year ago. For another, repossession rates are rising, and credit experience, according to Ray H. Matson, vice-president of the First National Bank of Chicago, is the worst it has been in

Matson, who has kept tabs on finance companies for vears, last week told the American Finance Conferencewhich represents the smaller finance outfits-that two

factors were responsible for their problems:

• The compacts, with their lower unit sales price, require greater turnover in order to produce the same dollar volume of financing; this boosts operating costs.

· The compacts have hurt the market for latemodel used cars, which has led to increased losses on repossessions.



"Welcome back, standard transmission," says a fast-growing number of car-owners! A great majority of those who buy sports cars specify the "stick shift" for the fun of it . . . while 49% of all "compact" cars are so equipped for economy's sake. B-W's Borg & Beck Division makes these clutches-whose fast, smooth, dependable operation has been legend since 1913for most major auto-makers.

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this: longer-lasting, more accurate engine timing with an automotive timing chain developed by the Morse Chain Company (a B-W subsidiary). And also this: a uniformflow pump, researched into reality by the Wooster Division, to power the hydraulic system that gives farmers fingertip control of tillage tools. The pursuit continues. At the modern Roy C. Ingersoll Research Center and throughout the extensive facilities of Borg-Warner's

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Tomorrow's Phone Service Today

The three-way phone hookup in the picture below is a demonstration of the end product of the biggest research and development program ever undertaken at Bell Telephone Laboratories, Inc.—which is the largest industrial research establishment in the world. The electronic equipment behind the men is a completely new kind of telephone central switching office.

Eventually, production models of it will replace some 10,000 central offices—currently valued at \$7-billion—that interconnect the Bell System's 60-

million-plus telephones.

The new central office is all-electronic. Moving or wearing parts are largely eliminated; it can diagnose its own troubles; and it provides a whole raft of new services for subscribers. R. W. Ketchledge, who coordinated de-

velopment of circuits, components, and equipment for the project, says, "This new electronic office is not merely an improvement: it's a mutation."

• Long Test—This week, the 319 telephone subscribers in Morris, III.—a typical farm, business, and residential community 75 miles from Chicago—will get a first taste of what the mutant can do. For a year or two, they'll try it out, while engineers and scientists keep watch, logging its troubles and improving its design. Not till that long test run is over, will the final blueprints go to Western Electric Co. for production. Mass production of ECO, as it's called, won't start until 1965.

Actually, the Morris subscribers are getting a five-year preview of the telephone service of the future. Counting extensions, the 319 have 470 tele-

phones—instruments that look almost identical to current models. It takes a keen eye to spot the one difference, a set of small louvers on the left side of the base. That's where the sound of the electronic phone's "ring" comes out, the new phones don't have bells but little loudspeakers that emit a ring-length series of insistent beeps or vips, something like the noises of a mad scientist's lab in a Hollywood film.

That new ring is the least important of all the differences. First, there's no wait for the dial tone, it's almost instantaneous. The dial motion has a different feel, snapping back in a hurry instead of making a slow, grinding return. What's more, the number begins to ring immediately, with no pause while relays click into place.

· New Services-Still, these improve-



THREE-WAY PHONE HOOKUP is just one of the new services available with Bell Labs' new Electronic Central Office. Experimental model at Bell's Whippany (N. J.) labs is demonstrated the control of the con

strated by the three heads of the teams that developed it: (left to right) R. W. Ketchledge, William Kiester, and Clarence A Lovell. Cabinets behind them hold memory and logic circuits.



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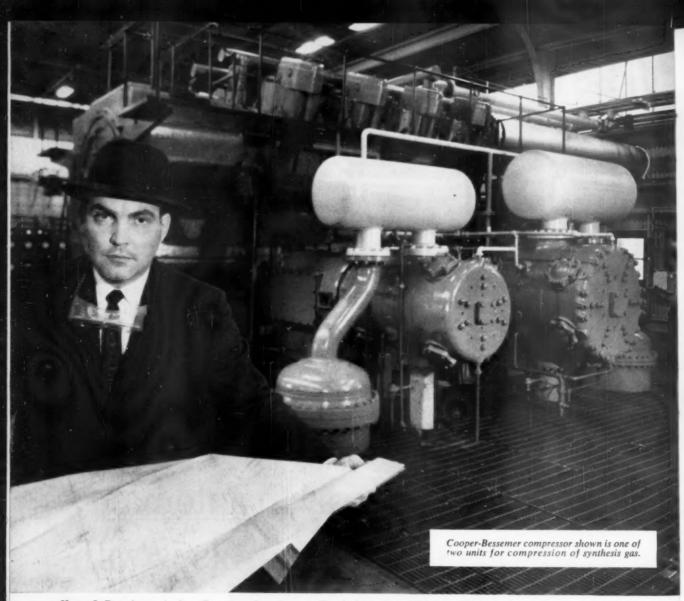
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GENERAL OFFICES: MOUNT VERNON, OHIO ENGINES: GAS - DIESEL - GAS-DIESEL COMPRESSORS: RECIPROCATING AND CENTRIFUGAL. ENGINE, TURBIN OR MOTOR DRIVEN ments, like the ring, are of marginal importance to the customer. It's the extra services that are really impressive.

 By dialing a two-number code you can ring any extension in a home or office. The phone is an intercom.

• For as many as 10 numbers per outside line, you can register your own two-number code for numbers that you call frequently. Residential subscribers are expected to use this for friends and local stores. Businesses can use it for suppliers or branches. For long-distance, this means you have to dial only two numbers instead of 10.

If you dial a four-digit code followed by a phone number, all incoming calls will be referred to that number. Thus when you go out, you can have all your calls transferred automatically to the place where you are going. Another four-digit code will restore normal service.

• For business, outside calls are directed to a particular extension. If that line is busy, the central office automatically rings the proper alternative extension. Up to now, this service has been available only on the newest types of PBX, limited to large companies.

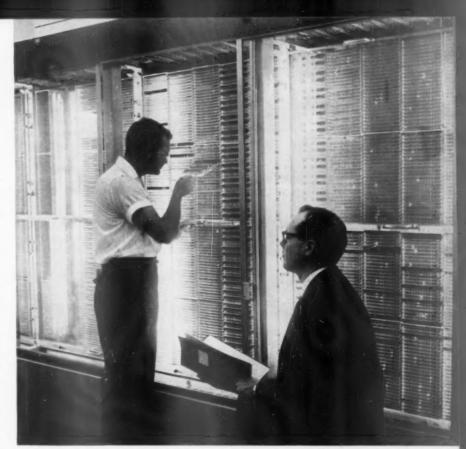
Two other services will soon be added to this quartet now available in Morris. A "busy camp on" will enable the customer who gets a busy signal to dial a code that will automatically ring the line as soon as it is free. And by dialing a code and number it will be possible to hook a third party into a call.

Just what services will be offered with the production models of ECO will depend a good deal on the experience built up at Morris. H. Bowen Stair, vice-president, operations, for Illinois Bell Telephone Co., is betting that call referral will be the most popular.

• The Bills—How much will be added to phone bills by all these new services is still a matter of guessing; for the Morris trial, they are all free. In the permanent setup, the two-digit extension ringing code will undoubtedly be free. Others, such as call referral, which means that ECO's computer-like memory must have more capacity, may carry a small extra charge each month.

Another kind of customer will be watching the Morris results carefully. The AT&T operating companies won't be ordering the new equipment from Western Electric until they see how the experiment works out. But there's little doubt that the operating companies will like what they see. After all, ECO provides more automatic services for them than it does for the telephone subscribers.

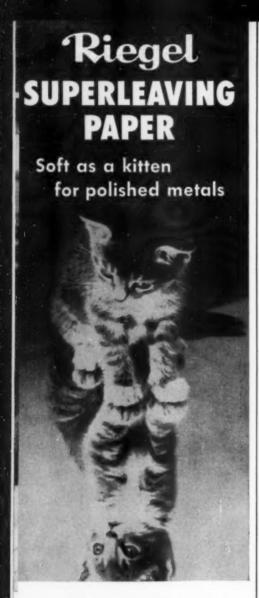
 Old Method—To see the real extent of the ECO change, you have to compare it with existing systems. As of now, the telephone system is a huge electromechanical computer. When you dial, each number represents electrical pulses



BANKS OF GAS DISCHARGE TUBES replace stacks of relays in the Electronic Switching Center being tested at Morris, Ill. Later, transistors may be used.



SEMI-PERMANENT MEMORY of the exchange is contained in photographic plate. Memory contains operating program and phone numbers, can be changed quickly.



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that trigger relays in the central office. These relays, or switches, act like a quick game of 20 questions, narrowing down possible interconnections until the last digit throws a relay that connects you to the number you dialed.

A central office thus contains banks on banks of relays, miles on miles of interconnecting wires in a maze that mystifies the outsider. It takes hours of careful soldering and rewiring to replace a bank of them. Years ago, it became obvious to the Bell System that the relay was not a good enough switch.

Typically, Bell Labs attacked the problem from the most basic angle. If mechanical switching isn't fast enough, try electronic switching. But electronic switching involved vacuum tubes, which need too much power and wear out too quickly. The lab search for an alternative took two routes:

Solid state materials, which led to the development of the transistor (BW-Mar.26'60,p74).

Gas discharge tubes, which use an ionized gas to conduct electricity and can be triggered rapidly from their non-conducting state to conducting with small loss of current.

It wasn't until 1955 that transistors and gas tubes were able to operate at high enough frequencies with high enough, power to make electronic switching possible. When they could, Bell Labs swung into massive action.

Right now, more than 300 engineers and technicians are working at the Labs on ECO, divided into three groups.

• Systems engineering, under William Kiester, has 30-35 men. They work mainly with AT&T to define the general features and specific services that the new system must render. They set the goals that the system must meet in performance and compatibility with the rest of the telephone system. They work on such problems as the optimum size for a central office, how many lines it should have, and what loads it will have to carry.

System planning and programing, under Clarence A. Lovell, has about 100 engineers. Essentially, they figure out how they can supply the services defined by systems engineering with the technological devices at their command.

• The third group, under Ketchledge, has the job of inventing the equipment, designing the circuits, developing new components, and solving the thousand problems that crop up in arriving at a practical and economical system that can do all the jobs demanded by the systems men.

The end product that has been produced is almost uncannily clever. Basically, it's a large-scale, stored-program electronic computer with a semi-permanent memory that can store

1.5-million bits of information. It also has a sizable short-term memory. This computer, instead of feeding its output into a printer or magnetic tape units, feeds the switching network that controls telephone interconnections.

The computer constantly scans all the phone lines that come into the central office. Operating at a clock frequency of 300,000 cycles per second, it scans any individual line several hundred times each second—that's why there's no detectable wait for the dial tone. As soon as the computer collects the dialed-in data, it needs almost no time at all to make the electronic interconnections with the party you are calling.

• Bookkeeping—The computer does more than that. Big photographic plates that make up its semi-permanent memory contain information on billing, on rate structures, and even on test programs that try out every electronic part in the system every few seconds.

ECO has thousands of modular plug boards that contain complete circuit or logic packages. If one package fails, the system automatically switches to a standby unit, then signals on a teleprinter in the office that a part has gone bad, and when and exactly where in the system. The maintenance man has merely to replace the plug-in unit and the machine returns to normal operation.

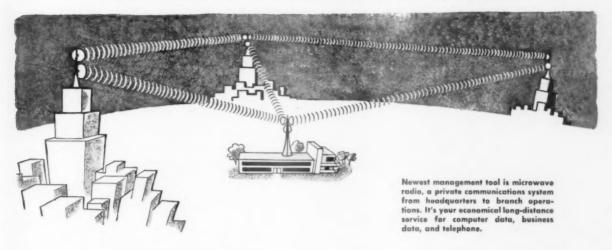
Maintenance is simplified in other ways. In an ordinary exchange, if a subscriber moves and wants to keep his old number, the wires at the central office have to be physically disconnected and the new line substituted from the new address. With ECO, the central operator has only to type on the teleprinter the phone number and the old address, along with the new address or line designation, and the time when the change is to be made. When the time arrives, ECO makes the change, silently and automatically, with nobody touching a wire.

• One-Day Job—With such a system, a new program or service can simply be sent by wire to all the telephone central offices. With a wholly electronic phone system, the long slow process of introducing improvements into a mechanical system is done away with. A new service could be introduced into the entire system in a single day, conditioned to respond to the spin of a new code on the subscriber's dial.

With the operating companies so likely to take to the new system, Western Electric is already preparing the first production prototypes at its Columbus (Ohio) plant. Later, when it swings into mass production, it will become overnight one of the largest manufacturers of electronic computers. That's quite a switch from turning out relays and mechanical devices. END

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What is microwave radio? Microwave radio is a system for transmitting information via an exclusive radio beam that connects all offices and plants with headquarters in complete privacy. It will permit you to take advantage of many advanced communications devices that you could not economically use or fully exploit before.

Microwave radio is economical In general, microwave radio speeds up the handling of information. For instance, one computer, located at headquarters, can process data for branch offices and plants instantly. Bills of lading, manufacturing orders, inventory lists, sales orders . . . in fact business forms of any kind can be transmitted instantly without using time-consuming mail service or costly outside wire service. Duplicate records and bookkeeping can be eliminated. Microwave radio is also your own private telephone and teletype service.

In short, microwave radio integrates a company's far-flung operations, producing for the first time an

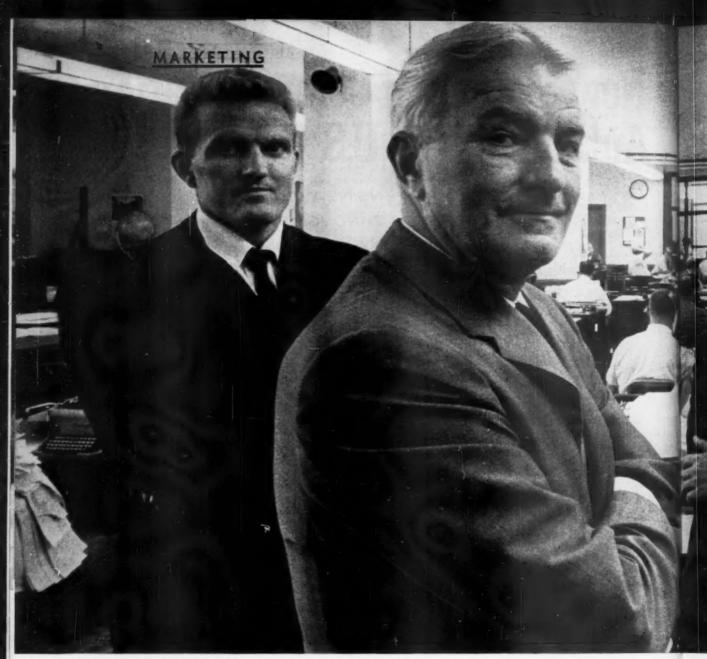
automated system of information handling that results in major improvements and economies in business efficiency.

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GENERAL BELECTRIC



TIMES-MIRROR TOP TEAM: (left to right) Otis Chandler, publisher of Times; Norman Chandler, president of Times-Mirror; Frank Haves

Los Angeles Times Revises Its Ir

The men of the Times (Los Angeles) pictured above are restless. That is not an unusual condition around the business and editorial offices of big city newspapers these days. They are beset by a host of problems; and, so far at least, they have few answers.

But the restlessness of the men who run Los Angeles' biggest daily is considerably less understandable when you look at the Times' record since World War II.

 Today it pretty well dominates its big and growing marketing area. • It carries more advertising linage than any other newspaper in the country by a wide margin (its closest competitor: the Miami Herald).

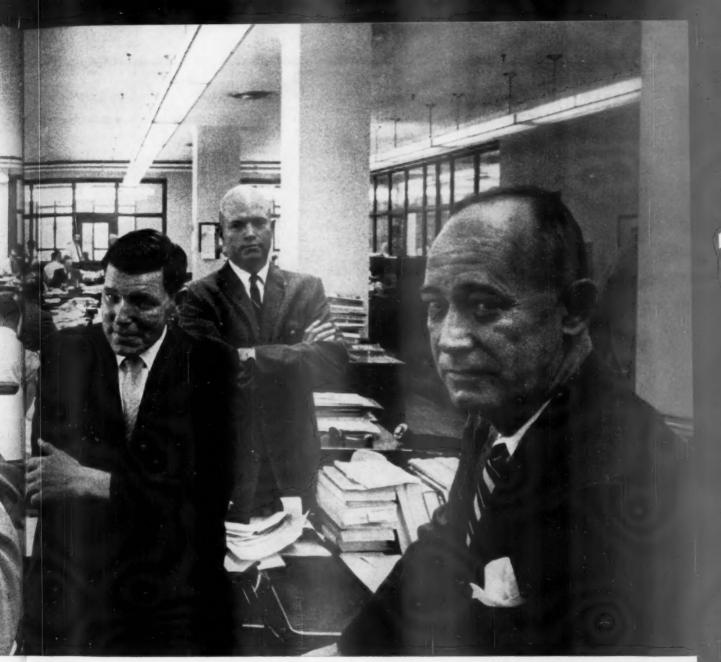
• Profits of Times-Mirror Co., which publishes the Morning and Sunday Times and the money-losing afternoon Mirror, hit a record of \$5-million in 1959 on revenues of \$97-million. (As a comparison, the New York Times on revenues of \$103-million last year had a net income of \$3-million.)

Circulation of the Times reached
 532,078 daily and 907,027 Sunday,

well ahead of its nearest competitor, Hearst's Los Angeles Examiner.

I. Rough Days

Nonetheless, this year the Chandler family—which controls and to a large extent operates the company—has been furiously refurbishing and upgrading both newspapers and Times-Mirror Co.'s other properties. For the fact is the Chandlers, both Norman the father and Otis the son, see difficult days ahead.



Frank Haven, managing editor of Times; Frank McCulloch, incoming assistant to the editor of Times; and Nick Williams, Times editor.

s Image to Reach Changing Market

Well they might, if you consider what has been happening among metropolitan dailies, taken as a group. Big city newspapers for years have been hit by increasing competition, not only from television but from suburban dailies and weeklies as well as mass circulation magazines. They also face rising production costs over which they have little control. In many cases, circulation has failed to keep pace with growing markets. The upshot has been a steady list of mergers, mechanical consolidations, joint advertising ventures.

• Lonely Readers—In New York City, where the Times and Daily News dominate, there are constant rumors of shaky situations among the other papers. That city plus Pittsburgh, Chicago, Washington, to name only a few, have seen old-time papers quietly fold or sell out. Just last week Hearst Consolidated Publications, Inc., sold another of its papers, this time the Detroit Times to the independently owned Detroit News.

Not only that, there are many critics who are convinced the American newspaper, although in many ways still the best published in the world, is rapidly losing its one-time role as an institution for intellectual leadership. In his book, The Fading American Newspaper (Doubleday), Carl E. Lindstrom, formerly executive editor of the Hartford (Conn.) Times, blasts management of newspapers generally for reverting to gimmicks and for being satisfied with incompetent editorial products. Drawing a bleak picture, he says: "The newspaper reader is about to become the displaced person of our day."

· Suburban Explosion-Healthy as it is,

SCIENTIFIC AMERICAN PATECENTS October 1960

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SCIENTIFIC AMERICAN 415 MADISON AVENUE, NEW YORK 17, N. Y. the Los Angeles Times worries when it looks back to 1948, the year it launched the Mirror. Since then, population in its marketing area has increased 60%, but the total circulation of the four city newspapers has increased less than 2%. Partly this is a result of the suburban sprawl. The city itself is 455 square miles, the metropolitan area 10 times that. Suburbanites, particularly in the widely scattered Los Angeles pattern, don't feel bound to a downtown daily. Instead, they have turned more and more to local dailies and even weeklies, which are surprisingly healthy. In the Los Angeles area there are 33 daily newspapers, many of which are vigorous and prosperous.

In New York, some of the city papers readily admit they missed the suburban population explosion, which papers such as the highly successful Newsday on Long Island eagerly grabbed (BW-Sep.28'57,p48). The same is true in other suburban areas.

• Off Target—The Chandlers weren't unaware of the suburban boom. But they misjudged how to attack it. The Mirror was launched as a breezy tabloid aimed at the growing commuting population. Unfortunately, the commuters in Los Angeles (as distinguished from New York City where some of the dailies still hang on to suburban readership) used autos, instead of public transportation. You can't read while driving, particularly in Los Angeles.

This, plus the fact that the commuting population has upgraded its tastes and is a better-educated and better-paid audience that doesn't take so readily to tabloid journalism, ruined the Mirror's chances as it was conceived. It has been a money loser, but the Chandlers aren't about to fold it. They need it as a competitive wedge against the other afternoon paper, Hearst's Herald-Express. On the other hand, they have made the Mirror a full-size paper and, like a lot of other things around the Times-Mirror shop, more changes are in the works.

II. A Planned Future

What Norman Chandler and his managing group have set out to do has three chief facets—some of which have little to do with newspaper publishing and some of which will have direct significance, if they prove successful for any metropolitan newspaper facing similar problems. In a nutshell, the Times-Mirror Co. is on its way toward:

 A diversification program that will lead it into areas outside newspaper publishing.

 A gradual but fairly radical revision of the company's ideas on how to reach a changing market for its papers, both as editorial enterprises and as advertising mediums. • A fresh concept of what its public will be wanting in the way of editorial content—knowledge that many critics of newspapers think has been needed for a long time.

• Freeing Profits—This year, the Times-Mirror made important steps to push its diversification program. The idea behind the move is simply to lessen the company's dependence on newspaper revenue, where it is becoming increasingly difficult to translate revenue into profits. Norman Chandler and his company treasurer, Omar F. Johnson, also insist that by investing in more profitable ventures, they will be able to publish outstanding newspapers, without a squeeze on profits.

So far this year, the Times-Mirror has taken over the New American Library of World Literature, a paperback publisher with 1959 sales of \$12-million; formed a joint venture, Times Mirror-Triangle Co., with Walter H. Annenberg's Triangle Publications, Inc., to engage in graphic arts; Times Mirror-Triangle already has acquired California Rotogravure Co. with \$5-million sales; came within a whisker of acquiring a textbook publishing house, a venture the Chandlers are thirsting to try.

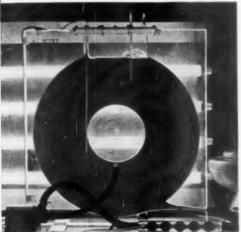
The Chandlers' diversification effort showed itself promptly. In his 40 weeks report to the stockholders, Norman Chandler noted that sales of the New American Library of World Literature accounted for a large portion of the increase in sales—from \$73-million for the 40-week period in 1959 to \$84-million in 1960.

Revenues from newspaper publishing increased only slightly and profits declined. Part of the decline in profits is attributed to the papers' refurbishment. But, as a result of higher advertising rates in January to match bigger circulation (at higher prices), newspaper division earnings should be improved. Still, for this year, it is clear that the exceptional performance by New American Library and gains by other ventures have offset a decline in newspaper profits, exactly the Chandlers' goal.

• On the Bandwagon—Actually, diversification began in 1946. Like other newspapers, the Times-Mirror learned a lesson in World War II and in 1946 went out and bought interest in two paper mills. In 1948, it got on the television bandwagon by launching KTTV, which, though Norman Chandler doesn't consider it a roaring success, operates profitably and brought in \$8.5-million revenue last year.

The company also owns the Times-Mirror Press, which prints telephone directories, and has a 14.8% interest in Tejon Ranch Co., largest land holding in California with 270,000 acres. This property is being infused with new blood, including a 39-year-old president, William E. Moore, Jr., who is building

SCIENTIFIC AMERICAN



HOLOGY OF DEUTERIUM

July 1960

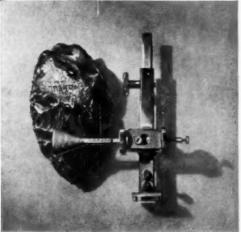
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FRIENDLY VIRUSES

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OPTICAL PUMPING

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N-3715

Next thing to a passenger-carrying missile, the 2,000 miles per hour super-jet airliner is already more than a doodle on the designers' drawing boards. You may fly in it within 5 or 7 years. Travel time from New York to Los Angeles or from New York to London may be so short that serving a meal will be out of the question—you'll just have time for coffee!

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a staff of experts on oil, tarming, construction, and city planning, to determine the best way to use the land.

· Assets-To make sure its diversification program doesn't stall, the Times-Mirror installed Robert M. Allan, Ir., as assistant to the president for acquisitions. A corporate staff will concentrate on planning, research, and negotiations leading to acquisitions. On it are Allan. Mrs. Norman Chandler, executive assistant to her husband: Philip and Harrison Chandler, vice-presidents and Norman's brothers: Omar Johnson; and Richard Adams, secretary and general counsel.

The treasury is bulging with common stock to acquire companies. There were 11.520 shares outstanding at \$2.800 a share in 1956. Today 5,907,000 shares are authorized, of which 1.9-million have not been issued and could be used for trading. If all this is used to buy companies, the Chandlers, who now own 59% of Times-Mirror Co., will still control a good 40%, counting stock in beneficial hands.

III. New Newspaper Era

Probably more important for the continued prosperity of the company are the newspapers, which still contribute three-quarters of the revenue. Here, the Chandlers and the younger blood they have brought in have firm ideas, some of which seem pretty radical in an industry not known for sharp innovation. The changes will affect circulation coverage, editorial content, advertising policies, and may eventually produce a product far different from today's newspapers.

· One Survival-Looking ahead, sav, 15 to 20 years, the Times men see the day when only one metropolitan newspaper will survive, even in gigantic areas like Los Angeles. Times editor Nick B. Williams thinks Los Angeles in 15 vears will be a 200-mile complex, stretching from the Mexican border to Santa Barbara. "We want to be the one metropolitan paper to serve that area," he says. To achieve that, they are dropping the idea of simply covering Los Angeles intensely. Rather, they are working toward a newspaper that will appeal to the hard core of intelligent citizens, spreading circulation thinly over a much larger area.

This, says Williams, is what other papers must decide-to concentrate on a smaller market or to hit a big, broad one for those people who want what only a large metropolitan paper is able

· Impact on News-The Times' idea, though Williams admits it is dreamy sounding, will have a lot of effect on editorial content. The paper will probably be heavy on national, international, and business news-a 180-degree shift from the policy of many big papers in

emphasizing local news. Local sections would be added daily at different geographical centers of the area, an extension of the zone sections that the Times started some years ago and has stepped up this year. The difference will be the local sections of the future will cover larger areas, be more completely staffed. · New Image Emerges-Already the Times has been moving toward this new character. Research showed that 44% of its readers earned \$10,000 or more a year, and 35% were college graduates. figures the Times says are much higher than its competitors and ones that stamp the Times as the "class" newspaper. Thus, the readers are showing less interest in crime and divorce, more interest in business news and the editorial page.

Robert W. Chandler, general manager of the Mirror but no relation to the other Chandlers, says that a study of 12 cities shows that between 1940 and 1960 conservatively edited newspapers raised their circulation from 4-million to 6-million, while the jazzier papers advanced only to 41-million

from the same base.

The Times doesn't mean to drop local news. But that news will be devoted more to discussing problems of the area, rather than to trivia. Divorce news, which the Times dropped almost completely a year ago with no complaints, and murder trials will be covered, but only if they are important. "It's a question of degree," says editor Williams. "We can't leave a complete vacuum for our competition.

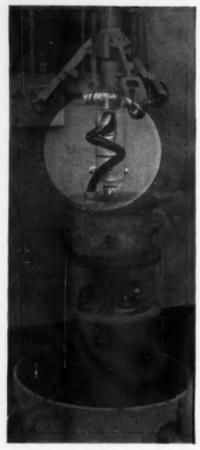
One straw in the wind is the fact the society section, under Mrs. Norman Chandler's direction, was dropped two years ago at the urging of her son, Otis, the Times publisher. Now it is a family section. Today, says Mrs. Chandler, "Inherited position means less. People have to earn the right to appear on our pages by solid achievement. We report parties now only if they have real news value." Items have been added: finance, recreation, eating habits, budgets, health, humor (including Art Buchwald's syndicated column).

· No Copycat-Will this make the Los Angeles Times a West Coast version of the New York Times? Norman Chandler bridles at such a comparison: "Everybody tells us we ought to publish a paper like the New York Times. He insists that the Times will have its own character, it will be local but on a wider, regional scale.

A good deal of upgrading to meet demands of the better-paid, better-educated readership has taken place this year, pushing the paper closer and closer to the news magazine concept, in both news handling and format. Stories are wrapped up in one depth account, rather than in nine running pieces; there is increased specialization

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This is a television camera. Its job is to photograph the substrata of excavations, thereby providing information needed by engineers in planning the construction of Boston's new Prudential Center, a multimillion dollar real estate development.

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of reporters on education, medicine, science. Today the paper has a full-time urban problems editor.

In the Sunday edition, there are even more marked changes. An entertainment "Calendar" section, easily separated to keep on hand for a week, has been added, plus a television rotogravure magazine. An experimental "Outlook" section rounds up business, automotive, and recreation news. An "Opinion" section includes important byline writers on national affairs.

Frank W. McCullough, who joins the Times Dec. 1 as assistant to the editor (he is Time magazine's West Coast bureau chief), says eventually a big city newspaper will have magazine sections not tailored to advertising, and that might not even carry ads. Otis Chandler contemplates the day when special magazine-type sections will cover the entire West, and may even be sold on a subscription basis besides being included in the Sunday Times.

IV. On the Business Side

The Times-Mirror has also changed tactics in both its advertising and circulation departments. Otis says: "We have young men who came up through the business schools and who aren't tied to traditional ways of the newspaper business."

Right now, the Times advertising sales staff is looking to incentive rates for multiple insertions from national advertisers. It is also trying to convince national advertisers—where the higher rates bring bigger profits—that the Times is a natural for institutional campaigns. It is also sending out more of its own selling force, trying not to rely so much on national representatives. The salesmen are armed with up-to-date research and audiovisual presentations.

In circulation, just as in the editorial treatment, there's a conservative swing. For the first time in years, subscription contests with all their gimmicks have been dropped this year for dealer solicitations and pinpointed direct mail advertising. Dealerships are being enlarged to make them more profitable; carrier routes are being cut down to give carriers more time to solicit new business. Emphasis is being put on 3-month rather than 30-day subscriptions to cut subscriber turnover.

• The Goal—Whether all this—the diversification, better business practices, and a sharply changed editorial tone and treatment—pays off is, of course, conjecture. A lot will depend on whether the Chandler management has bet right on its market. But the goal is clear. Publisher Otis Chandler puts it this way: "We expect to be the dominant paper in leadership, thought, and action in Western America." END

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New Standards for Consumption?

The cost of raising and educating children is a big reason many consumers are not on a buying spree.

Yet it isn't the whole explanation. Many families already have the major goods they need and can afford to shop warily before replacing them with new models.

Others say they're not reluctant to buy but are just broke. And they find credit buying less appealing.

Still others feel status can be expressed in other ways than through the accumulation of possessions.

Alice in Wonderland had never heard of Metrecal, but she had some dietary problems of her own. She was addicted, you remember, to eating cakes or drinking from little bottles, then holding her hand anxiously above her head to ask herself, "Which way?" She never knew whether a nibble would shoot her head to the treetops or crash it onto her slippers. Yet she kept on trying whenever an inviting goody with the words "Eat me" or "Drink me" appeared. Partly, she just liked goodies. And partly she hoped to work herself to the right size to get into the beautiful garden.

• Modern Predicament—Alice's predicament could be a fable for our times in the fateful fall of 1960. This is the feeling that emerges from a BUSINESS WEEK foray into the mind and mood of the consumer. In the past few weeks,

its reporters in 25 cities have been asking people: What excites you? What do you want? What's wrong—or right with the world?

Psychoanalyzing the "market"—meaning people generally—has become a major preoccupation of the dopesters in the past decade. Economists, sociologists, reformers, not to mention market researchers, have all gnawed at this bone. This fact in itself is revealing. You don't psychoanalyze people who are behaving satisfactorily.

From business' point of view, satisfaction is not the word to describe consumer behavior in 1960. Marketers everywhere have fretted: Why don't a growing population, growing families, fat income add up to record spending for goods?

In part, they forget that things aren't the way they were in the early postwar years. Then, stored-up cash, stored-up wants, a flood of new marriages sent sales spiraling.

sales spiraling.

• Change in Mood—With some hitches, the spending binge carried along at a brisk clip until the 1957 recession. Then, people began talking in earnest about the "apathetic" consumer. Two years ago, a BUSINESS WEEK study of the consumer's mood turned up these findings: confidence shaken by the recession, ego punctured—and fears stirred—by the volatile Sputniks; fury with rising prices. The reaction: a determined rejection of the troubled world around him and a fierce concentration on his own private castle (BW—Sep.6'58,p123).

This time, some of these same patterns came out again, even more sharply. His private world is still the major concern of the average man or woman. But there are some changes, and they contain a clear warning to marketers. If you think the consumer has been tough to sell, you haven't seen anything yet.

The most reasonable—and reassuring —answer to Business week's questions about how people are doing was: Just growing, thank you. There was a curiously minor key in the findings. "We have no predominant worries and no predominant jovs," one summed up.

• Destination Unknown?—But it's only a partial answer. More people, like Alice, are nervously asking: Which way? In the face of world crisis and an uncertain home front, two schools seem to be developing: (1) the do-nothing

school of the bored, the lethargic, and the fatalistic; and (2) the do-something school of the frustrated, the exasperated,

and the scared.

The balance wobbles, but right now the do-somethings seem to have the edge. Some people call the prevailing temper a taming down of life; some call it a marking time-for a march to an unknown destination. A new restlessness is the key, although in some cases it may seem only the restlessness of boredom

What does all this have to do with business? Plenty. For if the findings demonstrate anything, they say that, beyond their bread and butter, people buy the way they feel.

I. Confound Their Politics

By happenstance, the survey took place when the Presidential election drive was at its height. People's reactions-plus the election results-in a way epitomize their reactions on a broad front: a combination of ertia and inertia; a sense of futility plus a frantic effort to make a dent.

· Negativism-The hairline victory told clearly of a real split in thinking. The pre-election probing brought out a heavy accent on negativism. People weren't voting for their boy. They were voting against the other rascal.

Yet apathy wasn't the word-a record 66-million voters established that. In many cities people who had never bothered with such doings before-matrons, engineers, businessmen-were up to their ears in political activity

What was eating them? The international situation undoubtedly gave many a shove into action, although this varied from city to city. Fears of inflation and more taxes drove many to "play it safe with Nixon." Recession thoughts egged on others to Kennedy.

Here and there, the hope of some people that just maybe a leader would emerge from the campaign uproar suggests a readiness to move. "People are tired of the stagnant, genial, golfplaying approach," an Atlantan thought. And, from a Chicago newsman, "People are sort of waiting, maybe even beginning to look for something vaguely combining Einstein and Roosevelt in the way of leadership.'

Others threw up their hands in sheer frustration. "I pay taxes so that the best brains in the country can work on the Cuba mess," said a doctor in Salt Lake

City, "What else can I do? Yet over and over, a new note of re-

sponsibility was sounded for taking interest in political affairs, from the local level up.

Election Day itself elicited the most telling comment, from none other than Pres. Eisenhower. The President said, "I am voting for my grandchildren."

It's a safe bet that at least 50-million other Americans did the same.

II. Oh, My Children

Had there been no election, there's little doubt that the findings would have been the same.

Take the vote for the grandchildren. The extent to which ours is a childoriented society comes abundantly clear. The frenetic preoccupation with education has reached the point, in fact, where it almost indicates a sense of guilt and responsibility for having brought so many little beggars in to face a mess their elders despair of coping with.

• Educational Concerns—Schools—good plant—continue to be a burning issue. Let's not stint, is the verdict. A Worcester, Mass., school board was going to cut out a sprinkler system with the praiseworthy object of paring costs. The parents voted a firm no to that nonsense.

But many communities have graduated beyond concern for plant. It's the caliber of the education offered that worries many people now. So they are getting into the act. "It has gone bevond PTA," says a Detroiter. The thing to do now is to work on the school board, vote in school elections. Elections that a few years ago drew maybe 25% of Detroit's voters are now drawing anywhere from 50% to 90%. In Louisville, the "gifted child" is getting a lot of attention. Some cities-Nashville, for one-are heading for the private schools, partly the aftermath of integration. A New Yorker is concerned enough about the caliber of the schooling to teach some courses himself in his spare

College is a must. The children themselves feel the pressure of the competition for the "good" schools. In fact, more than one parent has some fears that education as a panacea is being overdone. Among the better heeled, child care includes all the frills: music lessons, ballet lessons, extra French lessons, charm schools for young daughters. • First Consideration—The child has reversed whole patterns of living. Parents are going to church who would be unlikely to go if it weren't for the children. Leisure activities are geared to

children's interests.

The elders of this postwar generation are counting the cost, and reaching for the aspirin. So wives are going back to work to pay for Emma's private school. An old car is made to last "till the children get through college." One family gave up its summer home. Another put off buying a boat. People at all levels are scanning the stock listings for a good investment to get Eddie through college.

III. Shall We Buy?

The high cost of a family today goes far to explain the buying slackness. There's just too much competition for that tight-stretched dollar. Not just for children, either. More people are investing against a rainy day, to bolster retirement income. Such investments are sacred, untouchable. mustn't touch our assets," insisted a 28-vear-old Pittsburgh housewife. Clevelanders are strapped; they are buying

Still, the consumer market has by no means played itself out. New families want the works-and the works set a pretty high standard nowadays. Even the older families want better goods; many are as hot for buying as ever. "I could blow \$3,000 right now if I had it," a Los Angeles salesman said.

· Broke, Not Reluctant-"I'm tired of hearing about the reluctant consumer," a Salt Lake City lawyer exploded. "I'm buving more than I've ever bought. But the cost of living like I want to live is up. I'm not a reluctant buyer. I'm a broke one."

Fears of a recession now seem to touch most people lightly. But some cities report a different picture: Phoenix, Miami, Milwaukee. Says a Portland



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(Ore.) public relations man, "We are in the damnedest depression you ever saw right now. Nobody has any money. It's just like 1934-35. Only now people have credit."

The heavy emphasis on security and investment bespeaks worry about the future. "If I weren't so worried about the future, I'd be spending more in the present," a St. Louis newsman reports.

• Satiated?—The families who started 12 or 15 years ago and have climbed the economic ladder have happier reason for slowing down. As one woman put it, "We have about everything we can use. I don't see any real need for anything but luxuries." An executive who concedes that he does, perhaps, indulge in conspicuous consumption, said, "There's not a helluva lot more my friends could buy." He blew himself to an electric kitchen this year—with three ovens. He likes to cook.

From well up the income ladder, a Houstonian summarizes: "We have all had our lunch. We are enjoying a feeling of satiety. And we aren't ready for supper."

• Changing Attitude—Among the older (and some younger) families, you find a tendency to de-emphasize material goods—much easier to do if you have them already. There's some feeling that consumption for consumption's sake is palling, and you find a slight guilt over past binges. The attacks of the reformers have been read, noted, and possibly are having some impact. Vance Packard's book, The Waste Makers, is a best-seller—and it attacked consumption.

In some quarters a half-hearted revolt is under way. "I'm sick of being told you should buy," says a Milwaukeean. A Pittsburgher argues, "No one can convince me that you have to trade in your car every two years." "We have too many possessions," says a New



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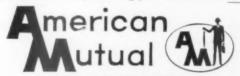
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Yorker. "We're throwing our furniture away."

• Sharp Buyers—The revolt and resentment carry over to the products themselves. "When you come right down to it," a California policeman argues, "what do you gain by buying a new car?" A Washington housewife says, "If there were a Volkswagen-type refrigerator on the market—built to last, without frills—I'd pay extra for it." More than one woman feels with exasperation that, for all the talk about market research, industry is foisting on her things she doesn't want, neglecting what she does want.

Call it a mature market if you will—mature in ownership, wiser in the ways of buying. Since many postwar families are buying mainly for replacement, they can take it easy. They shop, look at the price tags, read the labels. They don't have to buy a new chair today. They'll spend freely enough when the time comes. But what they buy had better be good—and it had better be better than what they had.

• New Thoughts on Credit—The sophistication that has come with years of buying has even begun to cast some doubt on the beauties of installment buying. An executive says, "I don't have the money to buy and I don't want to go into debt any more." The feeling that it isn't quite right is growing—and besides, you pay more. Even a cleaning woman says, "Us poor folks wouldn't buy anything if we didn't buy on time. But I know I pay more."

In Phoenix, where bankruptcies are rising, people are deciding easy credit is not the easy way to the good life.

IV. The Better Life

Ask them what they want, and most people come up with a recognizable version of the good life—20th Century style. What this is, of course, depends on where you stand in the economic and social scale.

· Multiple Goals-For the common



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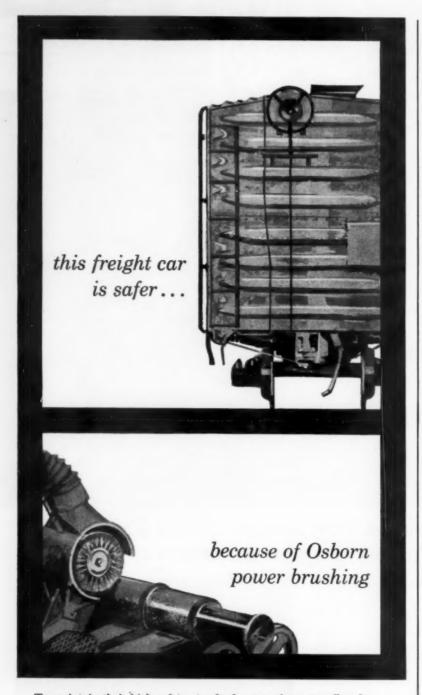
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... people are deciding easy credit is not the easy way to the good life . . .

(STORY on page 128)

people, one theorist has it, the good life means security; for the rich, that something extra that no one else has; for the in-betweens, affection, comforts, a chance for the kids, and a little left to spare. For the young adults, adds another, it's stability—which means early marriage, early home buying, a chance to do something responsible.

The good life for most of us, says a Nashville man, is private schools, association with upper-income-bracket people, clubs for our whole families, living in better houses. Not gadgetry, says Philadelphia, but a great desire for "the finer things of life." Some put their targets in simplest terms: affection, family unity, happiness for the children.

For most, the good life clearly means a backlog of creature comforts. Some tackle these goals in a methodical way that is almost frightening. The routine might go like this. Allow yourself a year or so after marriage so you can "get to know each other better." Then, children. Then, wives back to work to provide some special good: education, perhaps, or travel, or stocks.

• Community Interest—Since home is the focus, concern about the neighborhood ranks high. Towns with an integration problem worry particularly about this. In Louisville—and it was an exception—there's great concern with community planning and beautifying. Other places report that it's impossible to rouse people to this long-term need. Suburbia is losing some of its charm. Well-heeled Washingtonians are buying up and renovating small houses, close to town. New York suburbanites are looking wistfully cityward again.

Enough people have heard about the "status seekers" to suspect that status may be a dirty word. But people will always want to stand for something, and many want that standing to show.

Besides the home itself, it's the second car, maybe (and it must be a compact); a sailboat (better not to own any boat than put up with a motor); travel to exotic places; education; a one-of-akind product. Says a New Yorker, "Probably all my friends want something they can't afford: a piece of sculpture, maybe." In Washington, harpsichords will do nicely.

• Status in Nonownership—There's a faint indication that the peak of status may be nonownership. No car may well be better than one. No desk is the earmark of the executive who has really arrived.

Most of the targets do translate into

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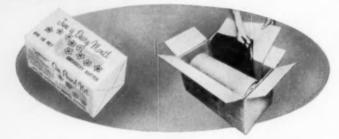
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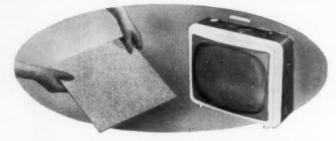
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specifics, into terms of good goods. But, somewhat oddly, that doesn't seem to carry over always into one of the prime targets: happiness for the kids. "I don't care what my boy does, just so he's happy. If he wants to run a gas station, let him."

V. Dream, or for Real?

Time and again, phrases such as "psychological pall," "marking time," uncertainty, lethargy, apathy, satiety turned up, as well as soberness, seriousness. They reflect contradictory reactions to a common—and ominous—background.

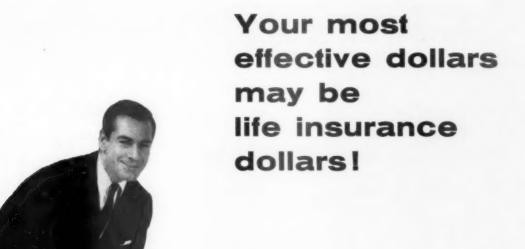
In some cities—Omaha and Oklahoma City, for example—you get an acute sense of boredom. No one is excited about anything, except maybe a teenage fad for hubcaps costing up to \$15. In Omaha, youngsters are reviving "blah" jokes: "But aside from that, Mrs. Lincoln, how did you like the play?"

Yet a Milwaukee librarian feels a growing urge to make more of life. Bostonians are finding real life more exciting than the best TV westerns. There's a bit more perspective, a bit more responsibility. "Status," says one observer, "means working for the community."

• Worry About the Unworried—People are worried that people aren't worried. Says a St. Louisan, "My main concern today is that people in America are not more genuinely worried. They're the most comfortable slobs the world has ever known. There's a seeming unwillingness to face economic and political realities. They're fat in the head and in the behind."

Some would accept the charge. "I had a good job offer the other day," one man says, "but I'm in a fur-lined rut, so why change?" There's a strong urge to stay safe in the rabbit hole, and to deal sensibly to make it the safest, happiest, nicest rabbit hole ever. But there's a stronger urge to come out.







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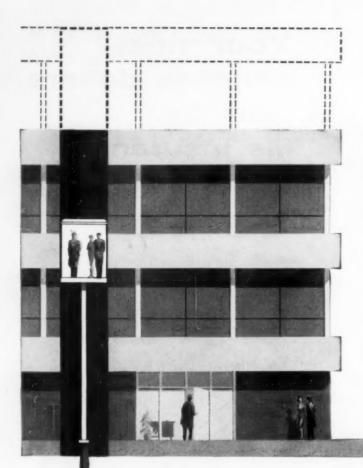
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Fashion World Hails a Winner

By this week, the women's wear industry had worked itself into its biggest dither since Dior dropped the hemline. The Presidential race may have been close but, as far as fabric and garment makers are concerned, there was one clear winner: fashion.

The whole trade is eagerly looking forward to the day when Jacqueline Bouvier Kennedy takes over as First Lady. Ebullience overflowed in an industry that isn't noted for reluctance to grab onto anything to create excitement. Phrases burbled from the mouths of fashion editors, designers, dress houses, retailers.

"Nothing like it since Dolly Madison," says a fashion expert for Celanese Corp. of America. "A terrific influence," says David Schwartz, head of Jonathan Logan, Inc., big New York dressmaker. "Best thing that ever happened," says Berta Moore of Berta Moore Fashion

Syndicate. "With her in," says a Los Angeles fashion critic, "we could sell fox-hunting clothes."

So it goes as the industry publications, glamor magazines, and the men whose fortunes turn on establishing salable styles and fashions contemplated the effect Mrs. Kennedy will have on how American women dress and how they buy.

I. First Lady of Fashion?

To be sure, you can find minority opinions. A Los Angeles observer tersely says: "It won't make one bit of difference." But that remark is about as far away from the majority opinion

as Alf Landon was in 1936. For the fact is that whatever any First Lady wears will be noted, although whether it sets a trend is something else again.

• The Difference—The flaring interest in Mrs. Kennedy's clothes (right now, a maternity dress manufacturer is pushing as its Kennedy dress the maternity gown she bought at Saks Fifth Avenue) goes beyond this obvious fact, and fashion people feel they had a stake in who won the election.

Says one West Coast fashion expert: "Pat Nixon wears what any well-dressed White Plains matron would wear; Jackie Kennedy has real fashion leader-

ship "

Fairchild Publications, Inc.'s Women's Wear Daily, which has splashed the news of Mrs. Kennedy as if it were she, not the senator, who won the election, adds this about Mrs. Nixon: "Follows a conservative line . . . will never set the fashion world on fire."

• Can't Help Leading—Washington fashion editors recall that when Mamie Eisenhower moved into the White House, thousands of women copied her bangs. Her favorite shade of pink became the rage. Her inauguration hat, a cloche with fluted edging, was copied by the millions, with price tags ranging down to \$1.98. But though Mrs. Eisenhower's matronly, somewhat undistinguished clothes caught women's fancy for a while, the avant-garde soon lost interest.

With Jackie Kennedy, just about everybody agrees, it is going to be different. She is high fashion's girl. "Alleady developing," says Ruth Wagner,



NEW FIRST LADY is expected to set fashion pace. She's being compared with . . .



DOLLY MADISON, whose name is synonymous with fashion, social leadership.



HARRIET LANE, niece of James Buchanan, noted for her style and vivacity.



FRANCES FOLSOM, whose White House marriage at 22 made her Mrs. Cleveland.



SLACKS in vivid colors were acceptable in wife of candidate, but fashion people wonder if First Lady will wear them.



FASHION-MINDED family-her mother above-will frequent the White House.



FORMAL dress (as of 1958) shows Mrs. Kennedy's bold sense of style.

fashion editor of the Washington Post, "is a 'Jackie look.' It's a kind of understated elegance—the unfitted silhouette that's been shown the past few years by Balenciaga of Paris."

• Since Dolly Madison—First Ladies since the time of the glamorous Dolly Madison have been weighed for their contribution to fashion and social leadership. Washington newspaperman Frank G. Carpenter, whose collection of columns has appeared in book form as Carp's Washington (McGraw-Hill), sized up all the First Ladies to Pres. Grover Cleveland's time and decided that Frances Folsom, 22-year-old bride of Pres. Cleveland in a White House ceremony, topped them all in charm

"Frances Folsom Cleveland," he wrote, "has now become the bright star in the galaxy of White House First Ladies." She was also the only First Lady younger than Mrs. Kennedy.

Carpenter did speak approvingly of the culture of Abigail Adams, the good nature and tact of Dolly Madison, and the style and vivacity of Harriet Lane, who served as hostess for her uncle, James Buchanan, our only bachelor President.

Beyond fashion leadership, Washington looks for style and vivacity from Jackie Kennedy, for more flair in the White House than anyone can remember for years, more exotic food, more exciting and varied formal entertainment, more interest in art and other forms of culture (Mrs. Kennedy paints, speaks four languages fluently, and was a straight-A Vassar student).

II. Haute Couture Furor

At the moment, the people who are particularly interested in Mrs. Kennedy as a model of high fashion are wondering about two things:

• Will one designer come out on top because of her preferences?

• Will she find it necessary or politic to "buy American" and thus give New York a big lift as fashion center of the world, as U.S. designers have long sought to make it?

• Favoritism Unlikely—In general, most agree it isn't likely that one or even two or three top fashion designers will benefit to the exclusion of others. Mrs. Kennedy and her mother-in-law, who is noted as a good customer of the French fashion mart, have favored Paris fashions, including such top couturiers as Givenchy, Balenciaga, and Bugnand.

As First Lady, there is little likelihood that she will give court favors to any particular fashion school. The question remains: Will she stick with Paris? Women's Wear Daily quotes Claude de Givenchy as saving: "It seems to us impossible that she would wear French clothes in official circumstances."

The New York group naturally hopes

she won't. It is known that Mrs. Kennedy likes the designs of Norman Norell, a top U.S. designer. In Washington, she frequents a French designer in the fashionable Georgetown area who makes seasonal versions of her favorite design: a simple, sleeveless, collarless, beltless sheath in a range of colors and fabrics. Washington fashion gossips say she is already considering two cocktail dresses for White House entertainment by Norell and has bought five dresses from Bergdorf Goodman for inaugural events.

• Dream Girl—This furor among high fashion leaders centers largely around Mrs. Kennedy herself, who is described as "a dream girl" as far as wearing fashions is concerned. But no one is overlooking members of her family, who are likely to be seen frequently around the White House: her sister Princess Radziwill, a much-photographed fashion leader; her mother Mrs. Hugh Auchincloss, voted most glamorous of her debutante group, and Mrs. Joseph Kennedy, the delight of Paris and Rome designers

Despite all the high hopes of high fashion, Jackie Kennedy herself seems unimpressed with a role as First Lady for fashion. She told a press conference at Hyannis Port, Mass.: "Being a fashion leader is at the very bottom of the list of things I desire."

III. Fashion for Everybody

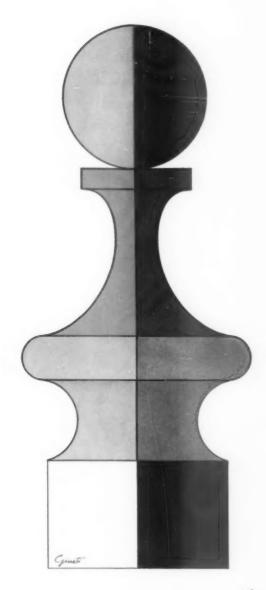
Whether she likes it or not, Mrs. Kennedy is sure to become a fashion pace-setter. Nor will this be confined just to the higher fashion set. All levels of the dress trade are eagerly looking toward her White House reign to create continuous excitement. Mary Lewis, director of Sears, Roebuck & Co.'s Fashion Board, is just as ecstatic as the editor of Harper's Bazaar.

Mrs. Kennedy's youth, good looks, and obvious good taste are what excite the people who cater to the mass market. They believe that she will give high fashion and more daring styles greater status in the popular market.

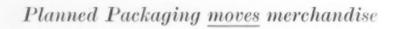
What the mass market particularly likes is the fact that, despite her ability to walk in high fashion circles, there is nothing outlandish in her styles. A Los Angeles expert says: "She has a great knack for wearing just the right thing for the right occasion, which is the essence of fashion taste. By being so chic, Jackie probably will bring about the greatest renaissance in fashion in a long time."

James Fann of California Girl, Inc., a junior fashion house, adds: "She exemplifies our type of woman—the image of the young woman on the move, the American woman, who is young at heart. Her young look will mean a wonderful help to us." END

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Social Science in Business Garb

Wesleyan's Loren Baritz (right) in new book tells story of growing use of social science as a management tool.

He raises some questions about how well the social scientists have served their own cause in serving business.

But he traces a name-studded history from the first invasion of business by psychologists to the current reign of the human relations experts.

Historian Loren Baritz of Wesleyan University (picture) has just published a study, The Servants of Power (Wesleyan University Press), that will intrigue many businessmen. Translated, the curiously poetic title might read: How U.S. Business Has Used the Social Scientists. But Prof. Baritz chose his words carefully; as he reads the record, managers have always used social scientists only selfishly, to increase their power over employees.

If the theme is neither new nor unchallenged, Baritz has still achieved two objectives worthy of note: He has put the entire human-relations-in-industry movement into historical perspective, reducing the long, little-known story to clear concise form. And he has raised again the ancient question posed by the role of the intellectual who willingly collaborates with the leadership of his society, rather than criticising it from the heights of his ivory tower.

· Point of View-From the first pages, Baritz' own assumptions are plain enough. He holds it the true function of the intellectual to preserve his own freedom and integrity. Like the salmon, he should swim upstream, against the current. Since Baritz sees the business ethic these days dominating all else, he condemns those psychologists, sociologists, and other social scientists who, he contends, have been putting new weapons into the hands of the managerial class. By selling their skills if not their souls to industry, they have betraved their heritage as scientists and intellectuals.

For the purpose of his argument, Baritz counts the social scientists as intellectuals, but he does this "with one eye closed." By the time he has finished with his analysis, he seems to have convinced himself that the industrial social scientist has never been anything but a technician.

• Names and Faces-Plainly, as a social critic, Baritz has his doubts about



the proper function of social science as a tool of management. But as a historian he has produced a work that will be read by every manager who wants to know what has been going on in the employee relations area for the last 60 years.

As Baritz tells the story, it has a continuity and consistency that may surprise some of those who themselves participated in it. Indeed, they may even find themselves mentioned, for Baritz brings a hundred companies into this history, and his references fill 50 close-packed pages.

• Latest Fashion—In bare outline, Baritz' history of the use of social science by U.S. management falls into three stages. First the psychologists, then the sociologists, and finally the human relations experts enter the scene. As most executives have heard—over and over again—it has been the last group that has set the fashion for management ever since World War II.

Baritz defines the current approach as involving all varieties of social science, and then identifies the main areas of interest—the motivation of employees, the nature of leadership, the dynamics of small groups, for example. Most recently, it has been "employee participation" that has been getting attention—encouraging employees to share in the decisions that affect them. The newest techniques, it is promised, will help employees feel a greater sense of importance and belonging.

• Back to the Source—No explanation of the current trend, however, can mean much without an understanding of its backgrounds. It is the great virtue of Baritz' historical approach that the bulk of his book covers the years from 1900 to World War II. It was then that industrial psychology was invented and that, later, industrial sociology developed out of the research projects undertaken at the Hawthorne Works of the Western Electric Co., Inc.

Baritz gives most credit to Walter Dill Scott of Northwestern University for introducing industry to the benefits of psychology. In the very first years of the century, Scott was teaching the advertising men they could sell more meat if they avoided referring to it as animal flesh, knowing the prejudices of consumers would pay off in better

• Enter the Test—A few years later, Hugo Muensterberg of Harvard, another pre-World War I pioneer, published the first test in industrial psychology. He soon was helping the American Tobacco Co. use tests for the selection of its traveling salesmen. The same company then called in Scott to reduce its turnover. During this period the first psychological consulting service for industry was organized at the Carnegie Institute of Technology under Walter V. Bingham.

While some companies welcomed Scott and his brother psychologists, their collaboration with industry was generally frowned on in academic circles. Even Scott had to perform his early work in secret.

• Outside Experts—Industry also had to be taught to value the advice of outside experts. Here it was the pioneers of scientific management—the early efficiency experts and industrial engineers—who led the way. They demonstrated that traditional rule-of-thumb procedures were not enough. And with their preoccupation with production methods and shop practices, they raised the question whether enough attention was being given to the employee himself.

Baritz thinks the social scientists should be eternally grateful for this. But he adds that this was not all the psychologists learned from the industrial engineers. They also took over their philosophy and purpose—to serve management in increasing efficiency and

improving profits.

As senior executives will remember, psychological testing for the classification of personnel received its real send-off during the first World War. Some 1,727,000 officers and men were given Army intelligence tests. Bingham became a lieutenant colonel and Scott was awarded the Distinguished Service Medal for wartime work. Then they and many other ex-Army psychologists entered industrial consulting, the Scott Co. being the first organization of this kind. Two years later, in 1921, the Psychological Corp. was founded as a "holding company" for psychologists. Later it was to employ hundreds of

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psychologists and take in more than \$1-million yearly.

• Rise and Fall-In 1921 psychology had made few real converts in industry. So all through the 1920s, while personnel programs grew and company welfare plans multiplied (and union membership declined), the psychologists worked hard to convince management that "paternalism" would succeed even better if only the right workers were selected in the first place to receive its

Yet the psychologists themselves were not generally agreed during these years-not even as to just what a psychological test was. Hundreds of companies nonetheless began to use readvmade tests though their significance was not known. The fad soon ran its course. According to Baritz, ninetenths of the companies that started to use employment tests in this postwar period sooner or later gave them up.
• Discovery-With only 7% of the

best-known companies using testing procedures in 1930, it was time for social science to come up with something new. What came up can be put in one word-Hawthorne. The long series of experiments tagged with that name started in 1924 with Western Electric, at its Hawthorne Works, trying to pin down the effect of changed lighting on production.

A dozen years later the evidence was all in to prove an entirely different point: Workers tended to coalesce into their own informal groups, and this fact had more bearing on production than any change in working conditions planned by management.

Every member of the groups studied was found to be restricting his output in response to values set by the group itself. Worse, from the psychological point of view, the individual performance of workers bore no relationship to their capacity to perform. No longer could it be argued that tests that might sort out the best man for each job would solve the personnel problem.

Instead, what Hawthorne did was to give management some new problems: How can worker groups be influenced to accept the goals of management rather than hold to their own values and interests?

• Results-Out of the Hawthorne experiments, Western Electric therefore developed a program of personnel counseling to help people to think along "constructive" lines so that they would be happier with their jobs. From 1936 to 1955, over a half-million such interviews were conducted at a cost which, Baritz reports, was \$325,000

Thanks also to Hawthorne, Elton Mayo, a professor at the Harvard Graduate School of Business Administration, and one-time psychologist, became the

leader of the best known school of human relations thinking. But Baritz criticizes Mayo, "industrial cooperation means that labor should do as management said." Not once did Mayo indicate that "perhaps workers knew what they were doing in opposing managerial logic." In short, all Mayo did was to "seek ways and means of making industry more effective and efficient."

· New Directions-Outside of Hawthorne, Baritz finds the industrial scene full of still other new concepts and techniques. All are neatly fitted into his historical survey: the development of attitude research, a renewal of interests in the psychological testing of employees, the growth of training programs, the appearance of the notion that discipline and authority should give way to leadership and persuasion. the increased popularity of personality testing, the coming into standard practice of merit rating, and the spread of employee counseling.

Before long, businessmen learned they must add the jargon of social science to the terminology of management: Role-playing, sociometry, group action laboratories, field theory, group dynamics, spontaneity theory, communications engineering, nondirective therapy, and the like are even now the subjects of management seminars and company conference.

· Alarm-In all these developments. however, Baritz believes that the social scientists who provided the technical knowledge and did so much of the work had a managerial orientation. They hired themselves out to a management that gratefully accepted their contributions, and went about "its business of repressing unionism, controlling the attitudes and thinking of its workers, driving output up, driving costs down, and regaining a firm grip on American social, intellectual, political, and economic life."

Baritz finds nothing good in this. To him, the very success of the social scientist in business marks his failure as a scientist and intellectual.

Baritz' history of these "servants of power" carefully records the progress of business toward greater recognition of the human element within industry. But its conclusion is one of foreboding, even alarm, that this has been accomplished by industrial social scientists who accepted almost without question the norms of goals of America's managers.

"These men," he says, "have been committed to aims other than those of their professional but non-industrial colleagues." They have joined with personnel men and managers in "hoping to realize the benefits of a controlled labor force, and the goal of 'custom-made men.'" END

In Management

Moving Up Day at Dow Chemical Puts New Men in Two of Three Top Posts

Two of the three top executive jobs at the Dow Chemical Co. were filled last week, when Carl A. Gerstacker (picture) was named chairman of the board and Herbert Dow Doan became executive vice-president. Gerstacker,

44, took over from Earl W. Bennett, 80, who retired after 60 years with the company. Doan, 38, succeeded Mark E. Putnam, who died this month at the age of 74.

The third member of the triumvirate, Leland I. Doan, 66, will remain president and chief executive officer. Dow has no mandatory retirement age for executives.

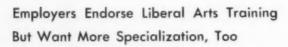
Chmn. Gerstacker joined Dow in 1938 as a

chemical engineer and specialized in finance. He became a board member in 1948, treasurer in 1950, and has been chairman of the finance committee since 1959.

The same day Gerstacker became Dow chairman, the Synthetic Organic Chemical Manufacturers Assn. announced that he is expected to be elected president of that organization next month. As such, he will be a major spokesman for the industry in its running battle with the government over tariff protection.

Before taking over as executive vice-president, Herbert Doan, son of the president, was manager of the chemicals department. He has been a member of the board

since 1953.



Businessmen are often criticized for extolling the virtues of a liberal education, then sending recruiters out after new graduates with highly specialized training.

Exactly the same kind of inconsistency showed up when the Harvard Business Review asked some 1,850 executives for their views on the right kind of education for business. More than two-thirds endorsed a "basic liberal arts education." Yet when they were asked to choose among courses, they usually picked the more "practical" ones—for example, report writing, personnel management, and cost accounting in preference to abnormal psychology, calculus, and creative writing.

Actually, some of the other questions and answers in the HBR survey suggest the inconsistency isn't so great as it appears to be. What the executives seem to be pushing for is not liberal arts alone but liberal arts plus a specialty. The survey showed a tendency for almost any combination of educational fields to win out over any single one.

Four years of undergraduate business school got only a few more votes than four years of liberal arts (only financial executives were strong for business courses). Two years of each led them both. Most popular of all was two years of graduate business school on top of a liberal arts or engineering degree. Although there was some tendency for executives to endorse their own educational background (or lack of it), on the whole the men surveyed favored lots of formal education.

Least favored (except for no college at all) was five years of liberal arts education. "Why would this man be inter-

ested in business?" one executive asked.

Insurance Man Offers a Yardstick For Medical Costs in Retirement Plans

What is probably the first vardstick for measuring the cost of adding medical care payments to retirement programs was presented by Morton D. Miller, vice-president of the Equitable Life Assurance Society of the U.S., last week. Speaking at the American Management Assn.'s fall Insurance Conference in Chicago, Miller estimated that 5% added to the "retirement package" could provide reasonable basic medical benefits, and 10% would allow comprehensive coverage.

Miller also noted that "the practice of handling pensions, group life, and health insurance separately has obscured the fact that medical cost is part and parcel of the larger problem of financing retirement." The cost of such a "total" package covering all company employees, he thought, would run about 12% to 13% of a company's payroll—in a "mature" company where there are about 18% as many pensioners as active employees.

How to Prevent Changes at Top From Upsetting an Organization

Turnover at the top of an organization doesn't necessarily disrupt efficiency. The real issues are whether the organization is accustomed to change and, not surprisingly, whether the new man is better than the old one.

That's what Yale University Prof. Donald B. Trow found after testing the performance of small groups subjected to successive job rotations. The groups were set up to resemble top management in the sense that their working relationships were relatively flexible and informal and that the new people had the opportunity to change the organization structure.

Whether a personnel change boosted or lowered a group's performance record depended on how the replacement compared in intelligence with his predecessor, and on the rate at which the changes were made. Irregular changes seemed to produce confusion.

To Trow, as he reports in the current issue of Human Relations, this suggests that organizations can adapt to just about any rate of succession provided the rate is steady and the successors are of uniformly "adequate" ability.



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INTERNATIONAL OUTLOOK

BUSINESS WEEK NOV. 19, 1960



French Pres. de Gaulle is moving with surprising speed to unravel France's tangled position in Algeria.

De Gaulle recognizes that the tide has turned against France because the Algerian rebels are getting support from the Communist bloc (BW-Nov.12'60,p69). He believes that Algeria precedes all other problems, that the very fate of France depends upon a quick solution to the riddle.

This week, de Gaulle informed his cabinet that he intends to call a referendum in France, probably in January, to get approval for a provisional government in Algeria. This administration, in Algerian hands, would govern a semi-independent nation until the Algerian people vote to determine their future.

The right wing in France and the Europeans in Algeria will emphatically oppose the proposal. But they must choose between de Gaulle's way and violence. Marshal Juin and Gen. Salan may have reached their "hour of truth."

Washington officials think that de Gaulle can win such a showdown. But he will have to shift his base of political support to the center and leftwing groups. Lately, they have been critical of de Gaulle's failure to bring the Algerian war to a close. But they will undoubtedly give full support to his referendum.

De Gaulle is expected to spell out his proposal in a speech in early December. It will be timed to forestall criticism and an unfavorable resolution in the United Nations, which will begin debating the Algerian question about that time.

If de Gaulle is successful in holding off U. N. action, he will let the U. S. off the hook. With an anti-French resolution in prospect, the U.S. would be forced to choose between France and the former colonial nations, which have made Algeria a focal point of their anti-colonial drive.

Whether the Algerian rebels will accept de Gaulle's proposal is an open question. A spokesman for the National Liberation Front (FLN) this week was skeptical, terming the de Gaulle proposal vague. "Every year," he said, "France moves at this time to confuse the issue in the U. N."

France will have some assistance in persuading the Algerians to accept. Tunisian Pres. Bourguiba is most unhappy about the penetration of Communist influence into North Africa. To stop it, he will press the FLN to negotiate with France, as will several leaders of African nations that are members of the French Community.

De Gaulle's chances of success are narrow at best. These moves may be the last chance to settle the Algerian crisis before it explodes into a wider war in North Africa and possibly a civil war in France-

As one step in a broad reshuffling of the Soviet currency, Moscow announced this week that it is officially revaluing the ruble in terms of gold and the dollar. This move is being meshed with a previously announced plan to introduce domestically a new "heavy" ruble on Jan. 1. The new unit is to equal 10 current rubles.

This Soviet currency operation has some resemblance to the French monetary reform of December, 1958, which included a devaluation and a 149

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK NOV. 19, 1960

new "heavy" franc worth 100 of the old francs. But, in Moscow's case, the change seems to be pretty much a bookkeeping affair, with a touch of propaganda attached to it.

Here's what's happening to the ruble: Effective Jan. 1, the Soviet government is multiplying the gold content of the ruble by a little more than four times. In doing so, it is increasing the official rate in dollars from 25ϕ to \$1.11 or by more than four times. And this makes the ruble officially worth more than the dollar—something Soviet propagandists are stressing.

But at the same time the domestic value of the new ruble is being fixed at 10 times the old, which means that domestic prices in terms of the new ruble will be one tenth of what they were. In short, the whole operation amounts to a 56% devaluation of the ruble, and a recognition that, at the old international rate, the ruble was correspondingly overvalued.

The change in the Soviet exchange rate will/have no effect on the U.S.S.R.'s competitive position in world markets. That's because the ruble is strictly a domestic currency. Soviet export prices are always quoted in foreign currencies.

However, Soviet accounting with respect to foreign trade will become much simpler. As things stand now, Moscow has to provide a large book-keeping subsidy to its exports and then offset this by taking a bookkeeping windfall on its imports.

At the Communist summit meeting in Moscow this week, the Russians and Chinese are trying to mend, or at least paper over, the ideological and political cracks in the Sino-Soviet alliance.

At midweek, there was little indication of how things were going. But the length of the conference shows that the rift is serious and that both sides apparently are determined to find a face-saving compromise.

Odds are that a communique will come out obscuring Soviet and Chinese differences over the inevitability of war and the desirability of violent revolution. It seems unlikely that Soviet Premier Khrushchev will be able to force the Chinese to back down.

Whatever verbal formula is found for immediate compromise, the Soviet-Chinese power struggle won't be settled conclusively. More and more, Chinese Communist party chairman Mao Tse-tung views himself the successor to Lenin as the ideological leader of the worldwide Communist movement. He will continue to increase Chinese power and to challenge Soviet leadership in the years ahead.

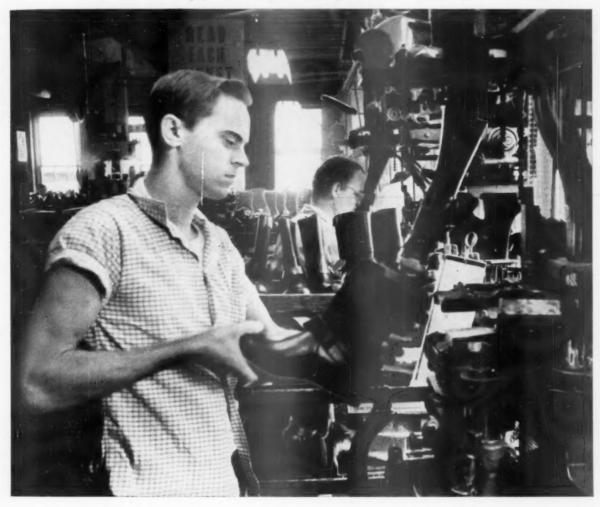
No unifying pattern has emerged from the unsuccessful revolutions in Central America this week. The turmoil in both Guatemala and Nicaragua appears to be homegrown and confined to local issues.

Cuban revolutionist Fidel Castro's efforts to export his revolution may have influenced the uprisings. But Washington officials say they have no evidence of Cuban support in men, arms, or money.

Popular support for the "outs" in both cases is lacking, as is any real anti-Yanqui sentiment. Neither U.S. business nor U.S. citizens in the area were seriously endangered.

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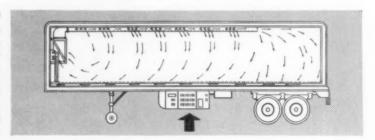
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Water Plan Still in Trouble

CALIFORNIA voters last week approved, by the narrowest of margins, a \$1.75-billion bond issue for a Bunyancsque engineering project to redistribute the state's water resources. It was the largest bond issue ever submitted to a state's voters, and it fattened this year's volume of bonds up for approval of the electorate to a new record (page 157).

Controversy over the project won't stop with the results of the referendum. There are still a lot of "ifs" to be settled by the legislature, the courts, and the state government. And the slimness of the vote margin last week—only 140,819 in a total vote of 5,587,961—is no clear mandate to override remaining objective.

The project calls for a \$332-million dam at Oroville on the Feather River (map) to collect "surplus" water and a 450-mi. \$991-million aqueduct to carry this water south to arid, populous districts extending almost to the Mexican border—a span of 750 mi. from the headwaters of the Feather. The rest of the \$1.75-billion would go for secondary aqueducts, reservoirs, and other facilities.

• How Voting Lined Up—The referendum result was considered a personal triumph for California's Democratic Gov. Edmund G. Brown, a San Franciscan who staked his political future on the issue. But voting was not along partisan lines so much as along a geographical split: North vs. South.

Brown was supported by some potent business interests, including the Southern Pacific railroad and the Kern County Land Co., as well as leading metropolitan and Central Valley newspapers. Big vote majorities came from the southern counties, which have a good half of the state's voters, and these were enough to make up for the fact that 43 counties opposed the project, with only 15 in favor.

Only two sparsely populated northern counties—Butte and Yuba—voted in favor of the bond issue, and these because of expected benefits from flood control and jobs around Oroville.

 Old Schism—The state has been wrangling for 20 years over a fair formula for dividing its water supply between the haves and the have-nots. The North has more water than it currently needs; the South has the residential and industrial growth—and the perpetual water shortage.

Last year, Gov. Brown decided that further delay would jeopardize the state's economy and risk the possibility that the skyrocketing of construction costs would doom the project. He pushed through the legislature the plan evolved by the Dept. of Water Resources, on which the vote was taken.

To study the financial and engineering feasibility of the plan, Brown early this year engaged Dillon, Read & Co., New York investment bankers, and Chas. T. Main, Inc., Boston engineering concern. They came up with encouraging preliminary reports last summer, with final reports just two weeks before election.

• Reading Two Ways—The consultants' final reports fanned controversy on the eve of election, because both sides of the issue claimed to find support there. In San Francisco, for example, readers were bewildered when the Scripps-Howard-Hearst paper, the News Call-Bulletin, headlined its story, "Two Reports Back Cal. Water Plan," while the independent Chronicle reported, "State Water Plan Called Impossible."

In effect, the consultants gave ammunition to both camps. They agreed on the engineering feasibility of the project but raised questions about details of financing and economic considerations.

Even though voters have approved the plan, legislative action is still needed on some details. When the legislature convenes in January, the points raised by the consultants are sure to be hotly debated.

• Critical Points—Perhaps the central question is whether the bonds, put on the market at a rate of \$120-million a year as work progresses, will strain California's credit. Brown is satisfied that they won't, and the Dillon, Read report conditionally supports him. The financial analysts recommend that the \$991-million main aqueduct be built before the state tries to market \$332-million of bonds for the Oroville dam—the market wouldn't absorb both bond issues at the same time, they sav.

This doesn't fit in with the governor's plans. It could delay the dam for 10 years, and Brown is committed to build the dam right away, at least to a height that will prevent a recurrence of the disastrous winter floods of 1955. The frail support his plan gets in the North could evaporate if the flood-control feature fell through. Brown has two

To build the dam only to flood-control height at the outset. The \$332-million is assigned for a combination flood-control and power dam 730 ft. high; a lower dam would cost considerably less.



 To build the dam to its full designed height but to issue revenue bonds, independently of the general obligation bonds, for the portion of cost that can be amortized through sale

Meanwhile, the fear of strain on the state's credit alarms the San Francisco Bay Area Rapid Transit District, which hopes to put a \$1-billion bond issue up for vote between next November and June, 1962. The district wouldn't like to market its bond issue anywhere near the other big one.

• Appeasing Labor-One of the issues the legislature must decide concerns the rates to be charged for water to farmers. Organized labor normally supports Brown's Democratic administration, but the AFL-CIO State Federation of Labor (except for construction unions that would benefit directly) was dubious about the water project. It demanded assurance that large landowners and ranchers wouldn't be "un-



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Brown answered by proposing a surcharge of \$2 an acre-foot (enough water to cover an acre to a depth of one foot) on all water supplied to land holdings in excess of 160 acres. Under present state law, he was advised by consultants, such a surcharge would not be permitted. So he needs an amendment by the legislature for a surcharge that labor may argue isn't high enough. · What's Surplus?-Another issue. which might wind up in the courts, is the definition of "surplus" water. Northern interests fear that the plan's guaranteed delivery of 4-million acrefeet of water per year to the South might cramp their own area's growth.

The analysts agree, to the point of recommending that the waters of the Eel River, on the north coast, be captured and funneled into the channel of the Sacramento River as a supplemental supply. The state has had such a project in mind but not for immediate

development.

· Long-Range View-As the battle heats up. RAND Corp., a Southern California nonprofit research group that works principally for the Air Force. provides fresh ammunition in a report published last month by the University of Chicago Press. RAND's staff has been studying the long-range water problem of Southern California.

Water users in that area have been heavily subsidized, the report says. Rates in and around Los Angeles are only a little more than half San Francisco's rates, and about 35% lower than the average of 500 U.S. cities that own their water systems. In the 1958-59 year, the Metropolitan Water District received only \$11.1-million in water revenues but got \$27.6-million

The MWD and the cities that resell its water to consumers have cooperated to promote use of the expensive aqueduct that brings Colorado River water to the Los Angeles area. By subsidy through taxes, they have kept rates low enough to dissuade water users from digging their own wells. In one example cited by RAND, Los Angeles bought water from the MWD at \$22 an acre-foot and sold it to irrigators at

Estimates of the basic cost of Feather River water delivered in Los Angeles range upward from \$63 an acre-foot.

RAND scientists suggest that if southern rates were brought up to the level of those in the northern part of the state, excessive use of water for irrigation (now a use for 700,000 acrefeet a vear) would be discouraged. A diversion of 400,000 acre-feet a year from agriculture would support a population rise of 24-million, they say. END



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Mostly, the Vote Was "Yes"

With California's record-breaking \$1.75-billion water bond issue leading the way, voters across the nation last week approved a record volume of such proposition—about \$3.3-billion.

The volume submitted to them— \$3.7-billion—was the highest for a November general election, according to the Bond Buyer. This broke the record of \$2.7-billion set in 1956 and was well ahead of the \$1.4-billion last year.

The success of the large issues (table) brought the share of approved issues to around 90%—highest since 1956 and considerably above the ratio in other elections earlier this year.

• Education Leads—Once again, as the table shows, voters tended to be selective. They seemed to give their top priority to education issues—with the notable exceptions of such cities as St. Louis and Pasadena—and their lowest priorities to public buildings.

Running second to the California water scheme among the new public projects to which voters consented was the \$195-million Illinois issue to build new facilities at the University of Illinois, Southern Illinois Univ., and teachers' colleges in the state. Proposals for higher education also went well in Oregon, New Mexico, Rhode Island, and Alaska, but a \$7-million issue for the University of Louisville was beaten.

Illinois also led the list in health proposals with a \$150-million issue for mental health and welfare facilities. Smaller hospital measures passed in Cincinnati, Lorain, Ohio; and Alaska.

Los Angeles had the largest issue for schools, one for \$153-million for ele-mentary and high schools and junior colleges. Others were approved in Duval (Jacksonville), Hillsborough (Tampa) and Pinellas (St. Petersburg) Counties, Fla.; Baltimore City and Baltimore County, Md.; Peoria County, Ill., and Hamilton (Chattanooga) County, Tenn. · Inadequate Majorities-In two major cities where school issues lost, they got more yes votes than no votes, but lacked the required two-thirds. For St. Louis, the defeat of the \$29.5-million issue was the third this year. Pasadena, often torn by strife over school budgets, failed to O.K. the \$13.5-million of bonds that would have financed a new city college and permitted conversion of the old one into a much needed high school.

In three other states, meantime, sizable issues won approval. Oregon voters agreed to let the state borrow another \$135-million to make low-interest loans to veterans for farms and homes. Kentucky voters agreed to \$90-million for highways and \$10-million for parks.

Major Bond Issues on Which Voters Cast Their Ballots Last Week

	APPROVED (Millions of Dollars)	DISAPP.	PURPOSE
	1,750.0		water
Illinois	195.0*		universities
	150.0*		health & welfare
Oregon	135.0		veterans home & farm loans
	47.5		universities
		40.0	state buildings
Los Angeles School Dist	153.0		schools
Kentucky	100.0		roads, parks
Kansas City, Mo	75.0		sewage
New York State	75.0		parks
Philadelphia	47.3		various improvements
Baltimore	36.0		schools, etc.
************		10.6	buildings, etc.
San Diego	42.5		sewage
Alaska	30.5	, .	ferries, etc.
		9.0	state buildings
Duvel County, Fla	35.0		schools
St. Louis		29.5	schools
Baltimore County, Md	26.9		school, roads
Columbus, Ohio	25.0	13.15	various imp.
Rhode Is. Turnpike Auth	- 4-	20.0	bridge
*Apparently approved, subject to canv	QSS	7 7-1	OBUSINESS WEEK

And New York State authorized a \$75-million proposal for parks.

· Sewage Issues-Sewage treatment and transportation issues also settled well with the voters. On the Missouri River, federal and state efforts to clean up pollution seemed to have an effect as sewage issues passed in Kansas City, Mo., Kansas City, Kan., and Omaha. Similar issues cleared in San Diego, San Francisco, and Cranston, R. I. Among transportation issues, Alaska authorities were surprised at the success of a \$23-million proposal to provide ferry service in several places where water separates cities. In Philadelphia, officials saw a vote of confidence for their efforts to improve commuter service as voters agreed to 56-million in bonds for new or improved facilities.

Of all the groups, bonds for public buildings fared the worst. Oregon trounced a \$40-million issue for new state buildings. King County (Seattle), Wash., rejected one for a new sports arena. Baltimore rejected a \$9.5-million batch including money for art gallery expansion. Others met defeat in Alaska, Sonoma County, Calif., and Tacoma, Wash. A notable exception occurred in Cleveland where, after two similar proposals had lost, voters agreed to \$10-million in bonds for new exhibition and convention facilities.

Voters also dealt with many other measures. In California, for instance, they rejected proposed reapportionment of the Senate that would have given southern California control of both houses, it already controls the Assembly. Iowa voters defeated a proposal for a constitutional convention, but Michigan's electorate put a convention call on next spring's ballot. Missouri and Nebraska agreed to let cities sell revenue bonds to finance plants for industrial prospects. END

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Taxes and Reapportionment

Along with their regular duties, 25 states next year have to redraw Congressional districts. Generally, the party now controlling the legislature will serve its own interests.

When they went to the polls last week. Americans in 27 states were voting on governors and in 42 states were choosing members for one or both houses of their legislatures.

The consequence of these elections will be felt in more than such matters as taxation, spending, and enabling legislation. Next year, as every 10 years, the legislatures of 25 states also have the obligation to reshape the districts from which their states send men to the U.S. House of Representatives.

In the gubernatorial elections, the Democrats came out slightly ahead. They took governorships away from Republicans in seven states and kept them in eight others. The Republicans wrested gubernatorial posts from Democrats in six states and hung on in six. · GOP Gains-But in legislative elections, the Republicans fared much better. Of the 24 legislatures that had been completely controlled by the Democrats, the Republicans won majorities in both houses in Idaho and Ohio and took the lower houses in Connecticut and Montana. Of the 10 legislatures that had been divided, the Republicans won complete control in Michigan, South Dakota, Wisconsin, Wyoming, and apparently in Illinois. By contrast, the Democrats did not take away complete control of any legislatures held by the Republicans and took charge of only two divided legislatures, in Pennsylvania and Utah.

I. Reapportionment

This year, control of a legislature gives a party the power to gain the most-or lose the least-when Congressional seats are being redistricted. This week, the Census Bureau submitted to Pres. Eisenhower the list of 16 states that will lose representatives and the nine that will gain them as a result of population changes reflected in the 1960 census. Unless Congress revises the list, these changes will be made:

States that will lose representatives: Pennsylvania, 3; Arkansas, 2; Massachusetts, 2; New York, 2; one each from Alabama, Illinois, Iowa, Kansas, Kentucky, Maine, Minnesota, Mississippi, Missouri, Nebraska, North Carolina,

and West Virginia.

States that will gain representatives: California, 8; Florida, 4; one each to Arizona, Hawaii, Maryland, Michigan, New Jersey, Ohio, and Texas.

· Partisan Consideration-Last week's elections provide clues as to how districts will be reshaped in the affected states

In California, for instance, the Democrats have strengthened their hold on the legislature. So, it's a safe bet they will redistrict the state to get the new

seats for themselves

In Florida, the Republicans gained some strength in the state legislature, but the Democrats still have firm control. There is talk that Dade (Miami) County will pick up a seat and that Hillsborough (Tampa) County will get a representative of its own. Hillsborough is now part of a district that also includes Pinellas (St. Petersburg) and two smaller counties. Because this district has Florida's only Republican representative, there is speculation that it may be gerrymandered so more Democratic counties are tacked on to Republican Pinellas

The Democratic legislature in Texas has a similar problem. Because of its population boom, Dallas County would be entitled to a second congressmanas Harris (Houston) County has. But Dallas sends Texas' only Republican to the House, and the legislature would not be eager to create a new district

In Ohio and Michigan, each of which is entitled to one new representative, the Republicans now control both houses of the legislatures. This means the Republicans are most likely to gain

from redistricting.

· Whittling Down the Opposition-In states that will lose representation, the party in control of the legislature will seek to eliminate seats in areas where the opposition party is strong. In Pennsylvania, which loses three seats, the Democrats undoubtedly will try this approach. The party kept its control of the lower house and managed to tie the Republicans in the upper house. With the Democratic lieutenant governor able to vote in organization of the upper house, the Democrats have organizational control of that chamber for the first time since 1937. If the Republicans give the Democrats too hard a time over redistricting, the Democrats could decide to put all Congressional elections on an at-large basis, cashing in on their statewide power.

Massachusetts Democrats also will try to eliminate Republican seats. In solidly Democratic Arkansas, the Democrats will have to eliminate two of their own. In Minnesota, where the legislature is divided, the Democrats can use the threat of elections at-large to get their way when district lines are redrawn

Where the Republicans have control -in New York, Illinois, Kansas, Iowa, and Maine-they undoubtedly will try to cut down Democratic representa-

If the legislatures act as expectedand the voters don't upset their schemes at the next Congressional elections in 1962-the Democrats would stand to benefit the most. They would pick up at least 15 seats and lose 9 for a net gain of six; the Republicans would gain only 2 but lose 11 for a net loss of

II. Taxation

In addition to redistricting, of course, the legislators also will have to deal with revenue matters in a number of states. · Clear Mandate-In Michigan, where the voters amended the constitution to raise the sales tax limit from 3% to 4%. the legislature is sure to pass enabling legislation because the Republicans, who wanted the hike, will be in full control of both houses.

Pennsylvania also is likely to raise taxes to avoid deficits. Its Democratic Gov. David L. Lawrence has favored consumer taxes and, in fact, got the sales tax up to 4%. With his party now in charge, he may turn to a property tax, raise the gasoline tax a penny.

In Connecticut, the Republicans regained their traditional control of the lower house and will have a great influence on taxes. It is generally assumed that the state must raise taxes, but the means is not certain. It might be a hike in the 3% sales tax.

· Sales Tax Battle-In Wisconsin, reelected Democratic Gov. Gavlord A. Nelson now faces a solid Republican legislature. In the last session, when the GOP had only the Senate, there was a stalemate: The Republicans wanted a general sales tax and Nelson pushed for withholding of the income tax. Now the struggle promises to be even hotter.

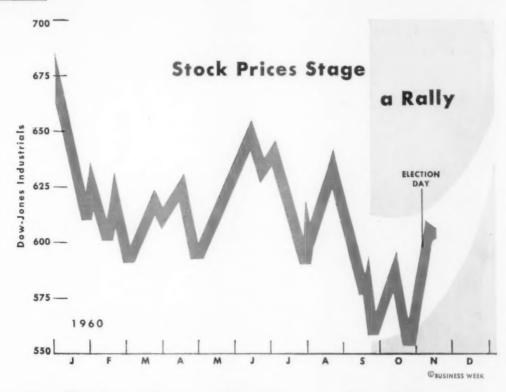
In Texas and Oklahoma, taxes are not a party matter because the Democrats are high in the saddle. In Texas, the lines are drawn between those who feel the state must have a broad-based taxsales or income-and Gov. Price Daniel who opposes one. The governor favors boosting minor levies. In Oklahoma, where the voters last week rejected a proposal to withhold the income tax, the legislature may revive the measure or raise the 2% sales tax. END

Experienced tool and die worker Hilbert Hillstrom, one of the 780 helpers Daisy Manufacturing recruited for Santa when this peaceful arsenal moved to the Ozarks in 1958, Daisy has already expanded once since it arrived and is now turning out daily 20,000 air rifles, cap pistols, pop guns, smoke guns and holster sets — and 32,000,000 BB's. The Arkansas Industrial Development Commission, State Capitol, Little Rock.



Santa Claus' helper at his Ozark workbench

THIS IS ARKANSAS



They Call It the Kennedy Boom

Along Wall Street this week, the surge in stock prices that spanned the election (chart) is being labeled the Kennedy bull market. That's only a half-truth, at best.

In fact, the new tag, more than anything else, masks a lot of red faces. In the weeks before the election, stock analysts were almost unanimous in their cries that a Kennedy victory would send prices through the floor. They said they feared an anti-business Administration that would be ruinous for the stock market

What they disregarded was the preelection rise in the stock market from its late-October low. From Oct. 25 to the day before election, prices rose 30 points, as measured by the Dow-Jones industrial average.

• Unscared—The Democrats' win did not upset investors, either. On the day after election, prices dipped 8 points in two hours, then rallied sharply to bounce over the pivotal 600 mark, ending up with a net gain of 4 points. In all, the three weeks showed a gain of 8%. Since then, the market has dropped, but brokers report that it is chiefly profit-taking, not wholesale liquidation.

There seems little doubt that expectations of a Kennedy victory did help push up prices prior to the election. Kennedy—as did Nixon to a lesser degree—had plumped for more federal spending, and promised a new spur to economic growth. Wall Street, for all its conservative bent, looks fondly on Washington activity to those ends. Investors believe that the sooner Washington steps in to shore up the current soggy state of business, the sooner things will pick up.

This factor is a major reason big stock buyers are beginning to show a definite shift in thinking-away from liquidation or extreme conservatism to selective buying. Most of them now recognize that business is dragging, but they believe that with prompt government aid the trouble will be mild and short-lived. They don't necessarily think Kennedy's spending program in specific areas-defense, public housing, medical care-will bring on inflation, but they do feel it will help perk up business. They feel too, that since the stock market already has had about a 20% correction of its earlier overoptimism, a time to buy choice issues is at hand.

• Pall Lifting—The bearish pall that was cast over the market for the past few months is clearly disappearing. Certainly, it takes courage to buy stocks now, and almost all brokers agree that

investors should have a big liquid reserve on hand.

But while this may or may not be the bottom of the market, prices are now down where an increase in equity purchases could be highly rewarding for the patient investor.

This doesn't mean that the market is about to go on a tear—or even that the October lows will hold. Rather, the trend appears to be one of gradually rising prices within a broad trading range.

This outlook is predicated on the way institutional investors have said they will act in the coming months. In the 1958-59 recovery in the market, institutions bid up prices to get the shares they wanted. This time, as they come off the sidelines, they will go slower, not be so aggressive in seeking stocks with historically high price-earnings ratios.

Institutions feel this cautious posture is a correct one in the face of less than cheery business news. The gold outflow is dangerous. Profit margins are still being squeezed. There are few prospects of any really strong rise in business and earnings.

business and earnings.
What's more Federa

What's more, Federal Reserve moves to ease credit—normally a harbinger of an upward turn in the market—may not







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have their usual impact. Some analysts argue that in the face of the gold drain. the Fed may not have so much leeway as it would wish to reduce interest rates to stimulate the economy

Still, a lot of institutional managers feel that many top-drawer stocks, down 20% to 30% from their highs, are worth purchasing. They say stock prices have discounted a 5% to 10% drop in the Federal Reserve's production index -the FRB has dropped about 4% since the start of the year-and that chances of a deeper drop in production are slim.

· Cult of Equities-Indeed, the feeling is growing that today's market pattern is close to that of 1958-59, when prices rose in the midst of a 14% drop in the FRB in nine months, gloomy news about corporate profits, and dividend cuts. The cult of equities that existed then is not present now. But the bias toward equities is reasserting itself.

• Return of Value-Another signal to the institutions is what some of them call the return of value to the market. Prices and vields still haven't declined or risen, respectively, to levels reached in previous cycles of business and stock price adjustments. But they are approaching levels from which a real recovery can be made.

There are many vardsticks to measure this return of value:

· On an industrywide basis, as many as 15 stock groups now yield 5% or more on average; five groups vield 6% or more. In December, according to Moody's Investors Service, none vielded as much as 6%, only five returned 5% or more.

· At the end of September, 175 stocks out of a list of 651 compiled by Moody's vielded 5% or better, 69 stocks vielded 6% or more. This contrasts with only 92 and 19, respectively, at the end of last December.

· Current price-earnings ratio for the Dow-Jones industrials is about 17.5, below 1958's high of 20.9-but still above the 11.6 low registered in 1957. The vield on the Dow industrials is 3.8% close to a two-year high.

So while the general run of stocks is still not cheap, the sell-off during the past year does reflect a shift from over-valuation to at least a more reasonable valuation. To sophisticated investors, this means that storm-cellar conservatism is no longer warranted. While they don't as yet subscribe to outright speculation, they insist that there's room for traders and patient investors to inch back profitably into the market.

Philadelphia Test for U.S. Bank Law

Proposed union of city's No. 2 and No. 3 banks will bring landmark federal ruling under 1960 bank merger law.

Philadelphia National Bank and Girard Trust Corn Exchange Bank, second and third largest in Philadelphia, announced merger plans this week. The new bank, which would have assets of \$1.9-billion and deposits of \$1.6-billion, would offer sharp new competition to First Pennsylvania Banking & Trust Co. (deposits about \$1-billion), currently No. 1 in the city. The new Philadelphia Girard National Bank & Trust would rank about 15th in the nation

The deal, when it comes up for required approval from federal banking authorities, will also provide the first working test of the new U.S. bank merger law, which Pres. Eisenhower signed earlier this year. Under the legislation, which spells out the power of federal authorities to rule on the competitive impact of bank mergers, interested agencies-the Comptroller of the Currency, the Federal Reserve Board. and the Justice Dept.-consult on the merits of any bank merger application. The Comptroller, however, has the final word in this case.

The ruling on the Philadelphia deal will clearly set the tone for others to

· Chances-At present, betting is that

the application will get agency approval, chiefly because there's little overlap between the business the two banks do. Philadelphia National's branches are concentrated on the north side of the city; Girard is heavy to the west and south. Moreover, First Pennsylvania will still be near the top among local banks in commercial banking-for both consumers and business-and in trust business, Fidelity-Philadelphia Trust Co. is a stiff competitor.

Frederic A. Potts, head of Philadelphia National and slated to be chairman and chief executive of the new bank, this week radiated an air of quiet confidence that the deal will get the neces-

sary federal approval.

The stock market, apparently, shares Potts' confidence. Both Philadelphia National (about \$44.50 over-thecounter) and Girard (which sold as high as \$59.00) are up over four points. "For a Philadelphia bank stock," says one dealer, "that's a lot."

The merger terms call for a swap of 1.2875 shares of Girard for each share of Philadelphia National. It amounts, says M. A. Schapiro & Co., Inc., bank stock dealers, to an "even swap of assets. Virtually no premium was paid for Girard." END

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Wall St Talks

. . about Chemical Bank's foreign plans, Dreyfus' cut in brokers' commissions. switch in mutual fund selling.

Chemical Bank New York Trust Co. is asking the Federal Reserve for permission to set up an Edge Act corporation. Chemical already has a finance-investment affiliate under the act, which authorizes the Fed to charter banking corporations to engage either in foreign investment or banking activities. Its new move would enable Chemical to invest in foreign banking situations (barred for finance investment affiliates) or to acquire foreign banks.

Drevfus & Co.'s move to cut commissions of its brokers-from a base of 37% of the total commission cost to customers to 33% (the industry norm)has brokers buzzing. Drevfus says that its heavy advertising campaign is expected to bring in enough new volume to offset any loss to its brokers, that it wants to depend on the firm's prestige, rather than its producers, to lure new customers. But Wall Street wonders whether its advertising will be for the Dreyfus Fund, at the expense of Dreyfus' brokerage business.

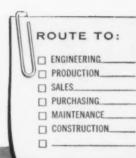
Beset by slumping sales, one big mutual fund says it may soon ditch its present dealer system, install a captive sales outfit to peddle its shares. Others would like to move in this direction, provided it didn't upset present brokerage house relationships. . . . And UBS Fund of Canada, Ltd. claims it is the first to offer shares-at \$10 a share-initially through prospectus ads and direct mail.

Avnet Electronics Corp.-\$17.50 a share on the American Stock Exchange -was in demand this week on rumors that its proposed merger with British Industries Corp. may be called off. If the companies do call it quits (Avnet denies it) the stock is expected to spurt, because of a rush to cover some 14,000 Avnet shares that have been sold short in an arbitrage between the two stocks.

McCrory Corp. (13 on the New York Stock Exchange, which has just gained stock control of H. L. Green Co., Inc., plans to revamp its whole set-up. Mc-Crory will sell off Green's Canadian stores and the Olen chain in the South -named after Maurice Olen, who was indicted on conspiracy charges in connection with an alleged \$6-million fraud that led to a public issue of Olen stock and its merger with Green.

A REPORT TO MANAGEMENT ON HOW

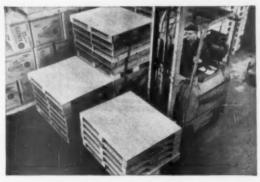
Industry cuts costs with FIR PLYWOOD





Fir plywood building components cut costs and speeded construction of this 50,000-sq.-ft. International Paper Co. plant, Auburndale, Fla. Giant plywood box girders support stressed skin roof panels, which incorporate ceiling, framing and roof decking. Panels are paired to form a peaked roof over each 40' bay, providing large clear floor areas. Exterior walls are overlaid fir plywood, which needs no finish and virtually no maintenance. Construction with light, strong, prefabbed plywood components kept over-all costs to \$7.54 psf. The entire structure was completed in only 154 working days.





Switch to plywood from lumber for pallets at West Coast Grocery Co., Tacoma, Wash., has greatly reduced repair and replacement costs. Plywood is smooth, splitproof, splinter-free; nails can't work loose. Easily damaged merchandise gets maximum protection.

Plywood ducts exposed to corrosive chemical wastes at this cellophane plant have required no maintenance in over four years. Exhaust manifolds remove air laden with sulfuric acid mist, hydrogen sulfide, other chemicals and water vapor. Plywood used is high density type, which has a smooth, hard surface, requires no paint or other protection, and is virtually impervious to moisture and most acids and other chemicals.

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In the Markets

This Week's Many Issues Strain Bond Market

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The capital market was having trouble this week in handling the unusually long list of debt financings offered to investors (table).

The TVA issue, quite naturally, got most attention. It is the first of a whole series of TVA issues—to finance expansion of power generation facilities—expected to hit the market at a steady pace over the next seven years. Bidding for the issue was close, with only \$1,000 in total interest costs—which over the 25-year span of the issue will run to \$55-million—separating the winning bid, submitted by a group headed by the Chase Manhattan Bank, and the runner-up. Dealers said the issue was priced "a little on the slim side" in relation to other top-flight utility issues, but that nevertheless investor demand for the bonds was "satisfactory."

Over-all, the strain on the capital market shows in what bond men are calling a "new level of bidding." With so many issues coming out at a time when investors are uncertain about their plans, yields on new corporate and tax-exempt municipal bonds have moved upward, and prices have slipped. Moreover, the backlog of unsold bonds on dealer shelves is continuing to climb, which suggests that even with easier money conditions yields are not likely to come down.

Minnesota Court Lifts Ban in Trust Fund That Forbids Investment in Common Stocks

A Minnesota supreme court has set aside a 43-year-old ban on a trust that prohibited investment of funds in common stocks. The likelihood of inflation is so great, ruled Chief Justice Roger Dell, that the prohibition, written by the late Dr. Charles H. Mayo, one of the famous Mayo brothers, cannot be enforced any longer.

The ruling is seen as a landmark decision by some attorneys, certain to be cited as a precedent in similar trust cases.

Dr. Mayo had set up a \$1-million trust in 1917 for eight beneficiaries, requiring that the trustee restrict their investments to real estate mortgages and municipal bonds, and specifically prohibiting investments in real estate and corporate stocks. A number of the beneficiaries protested last year, arguing that since Mayo's

death in 1939 inflation had cut the trust's real value in half.

Judge Dell went along. He said that unless Mayo's restriction were lifted, the assets of the trust within the next 20 years will, in all likelihood, be worth less than one-fourth of the value they had in 1939.

High Court Strikes Down Annuity Plan That Brought Substantial Tax Deduction

The Supreme Court this week struck down as a "sham" a deferred annuity plan under which a taxpayer claimed tax reductions totaling nearly \$300,000 in 1953 and 1954. In a 6-to-3 decision, the court ruled that an annuity plan entered into between Karl F. Knetsch and Sam Houston Life Insurance Co. resulted in "nothing of substance to be realized by Knetsch beyond a tax deduction."

The decision means that the Internal Revenue Service will take a harder look at similar annuity plans, and will probably toss out deductions realized by such arrangements.

Knetsch, the court found, entered into a complicated agreement with Sam Houston Life whereby he bought a \$4,004,000-annuity in the form of savings bonds. Knetsch put up \$4,000. The insurance company, in turn, loaned him \$4-million over the two years at 3½% interest, payable in advance. In the two-year period, Knetsch paid interest of \$294,000, received \$203,000 in additional loans as the value of the bonds increased.

Knetsch then took an interest deduction based on his prepaid interest. He paid, in effect, \$91,000 for a deduction of \$294,000, and the court estimated this saved him \$233,000 in taxes. The majority opinion of the court was that this was not a legal deduction for interest on indebtedness because the whole transaction was a sham.

The Markets Briefs

The Securities & Exchange Commission cautions that real estate investment trusts, which anticipate a boom under a new tax law (BW—Oct.8'60,p128), may be subject to federal securities laws. The new act enables the trusts, which have been taxed as corporations, to avoid corporate income taxes if they distribute 90% of their income to shareholders. SEC says that since a trust's securities must be owned by 100 or more persons to qualify for special tax treatment, it's likely an offering would have to be registered with the agency. Trusts may also have to register under the Investment Company Act, depending on their investment portfolios.

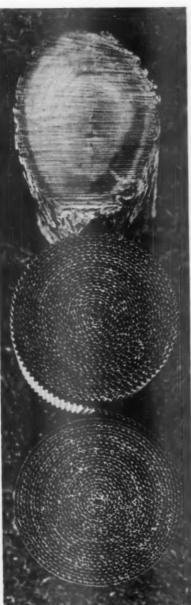
A liquidation plan for Du Pont, Homsey & Co., a Boston brokerage house, was approved this week by a U.S. District Court in Boston (BW-Nov.5'60,p129). The plan calls for the New York Stock Exchange—in an unprecedented action—to put up \$690,000 to cover losses customers of Du Pont, Homsey might have incurred as a result of alleged manipulations by Anton E. Homsey, senior partner, now facing trial for securities violations.

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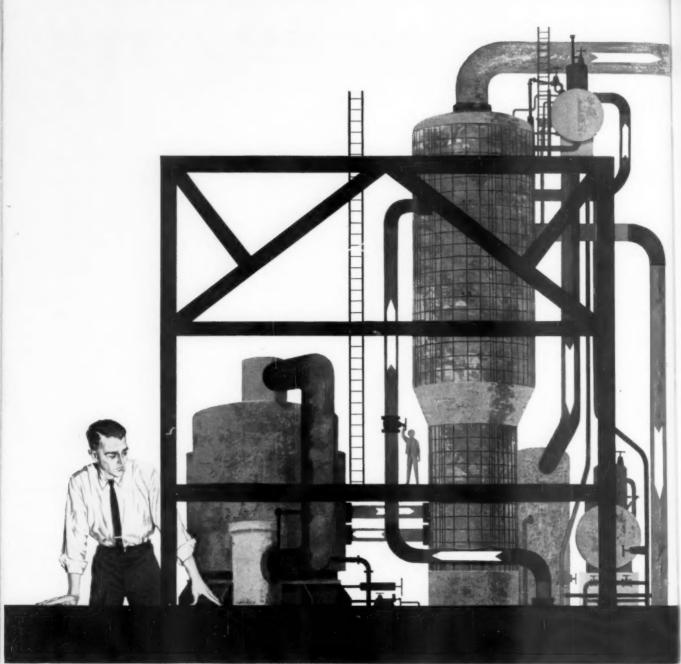
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BUILD A STRONG TOMORROW. Sturdy bones, sound teeth, and radiant health depend on phosphorus, vital element without which no living thing can thrive. You get phosphorus from meat, milk, butter, and eggs. Food animals get it from the good green earth. To make sure they get enough, chemistry takes a hand. Hooker smelts pure phosphorus out of phosphate rock and converts it to dicalcium phosphate—a dependable "carrier" of phosphorus, easily assimilated by poultry and livestock.

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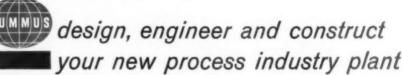




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PERSONAL BUSINESS

BUSINESS WEEK NOV. 19, 1960



You may work late hours, or take home a briefcase of work over weekends. If so, you might consider fixing up an office area in your home.

Finding an out-of-the-way place, with privacy and quiet, usually isn't a big problem. If you need only a little space, try using room dividers. If you want a separate room, you can convert a basement area, a seldom-occupied guest room, or the rumpus room your family no longer uses.

An interior designer can help a lot in giving you clever ideas. Cost of redesigning a room could run anywhere from \$1,500 to \$7,500.

Real trick is in how you conceal dictating equipment, files, and type-writer. You can use separate pieces of furniture or have cabinets built. Many office-furniture companies design equipment for homes—in both contemporary and traditional styles. The choice—in colors, finishes, and size—is broad enough to fit in with a variety of decor.

One office-at-home unit looks like a classical breakfront, gives maximum storage space for a minimum of floor area. Custom-made (about 10 ft. high, in fruitwood), it has a folding desk, file drawers, supply cabinets, and space for dictating equipment, typewriter, TV set, and hi-fi (around \$2,300).

Another popular piece is the credenza—a sideboard or bookcase without legs that rests flat on the floor. One version has an enclosed dictating cabinet and plenty of storage space (about \$380).

To make fullest use of wall areas, you can install special space-saving units. You put up floor-to-ceiling poles and brackets, then attach to them all types of equipment—desks, cabinets, shelves, lamps. An arrangement covering an 8-ft.-long wall space runs about \$420.

Art objects or maybe career mementos can set the tone for your office, so plan for their display. Other ideas: combine fluorescent with incandescent lighting, use conservative colors with bright shades in accent pieces, install wall-to-wall carpeting and roomy chairs.

There's a tax angle, too: If you set aside a separate office space, you can deduct the cost of equipment plus the maintenance cost (pro-rating it as part of the total cost of maintaining your home).

Warning: Infectious hepatitis, a virus-caused liver ailment, is becoming a serious health hazard.

If you've been exposed to someone with this ailment, see your doctor about getting inoculated with gamma globulin. This preventive step will lessen the attack if you're hit with the disease. Some symptoms: headache, fever, fatigue, nausea, lack of appetite, mental depression—they usually take two to six weeks to develop after transmittal of the virus.

Best way to ward off possible infection: Don't let yourself get rundown.

If you're a connoisseur of good Scotch, lay in a stock of imported, puremalt whisky—the kind preferred by native Highlanders.

The "single malts" are richer and smokier in flavor than the familiar blended Scotches. They're made from malted barley by the pot-still process, and usually aged from 12 to 15 years. You can tell the difference easily—it's like comparing bonded bourbons with blends.

PERSONAL BUSINESS (Continued)

BUSINESS WEEK NOV. 19, 1960 You can drink pure malts as highballs, aperitifs, or an after-dinner substitute for brandy. Some connoisseurs say that pure malts always should be drunk "naked"—no mixing with anything. Others recommend water (bottled spring is best). A good proportion is one-third Scotch, two-thirds water. Ice is frowned on—it dulls the taste.

There are three great malt whisky areas—the Highlands, the island of Islay, and the Campbeltown district. Generally, Highland malts are considered the lightest, and those from Campbeltown the heaviest.

The most famous malts come from Glenlivet in the Highlands—though some say these are too dry. Leading brand is The Glenlivet from the distillery of George & J. G. Smith, Ltd. Another top brand is Glen Grant.

Don't overlook other respected brands. From the Highlands: Glenfiddich, Blair Athol, Glen Mhor, Glenmorangie, Talisker, Mortlach, Glenfarelas. From the island of Islay: Laphroiag and Ardveg. Campbeltown's best are Springbank and Rieclachan.

Among the pure malts available here are The Glenlivet, Glen Grant, Mortlach, and Laphroiag. (More are coming on the market gradually.) Main importers include John Gross & Co., 11 So. Gay St., Baltimore; R. H. Elsbach Co., 351 Market St., San Francisco; and Leeds Imports Corp., 113 Chestnut St., Philadelphia.

If you'd like to sample a wider range of pure malts, stop in at Fortnum & Mason, Piccadilly, when you're in London. You can buy your duty-free quota (five fifths) and have it shipped—if your state permits liquor imports. Prices there are 15% to 50% higher than those on standard Scotch blends, but less than half the U.S. retail price.

Sauna baths—Finland's centuries-old answer to tired muscles and worn nerves—now can be built right in your home. Finns put them in a separate cottage, but you can install one in a basement or even a walk-in closet.

The sauna pep-up treatment works this way: First, a long dose of dry heat (212 deg. or higher)—it induces free perspiration within minutes, also dilates blood vessels. Then, a cold shower or plunge in a pool (Finns often use nearby lakes or ocean). Repeat, until refreshed.

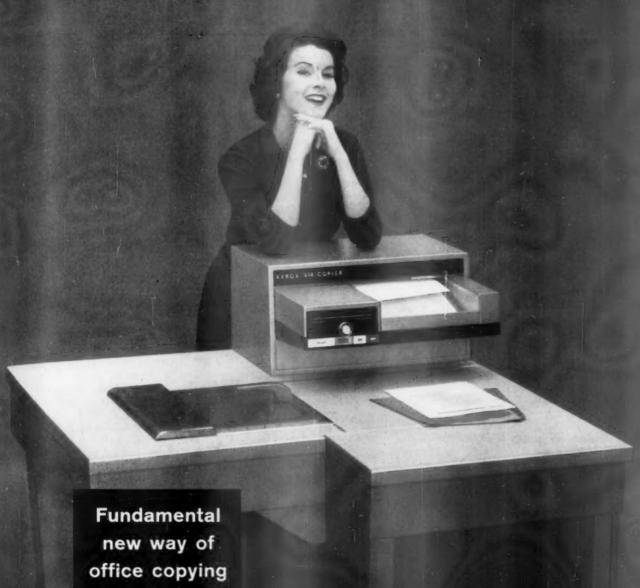
One type of sauna available here (through Puutalo, Helsinki, Finland) uses an electric stove. The sauna room is lined with white pine, redwood, or aspen—woods of high resistant quality. You attach electric cords and plumbing to existing outlets. Typical installation designed for an 8-ft. by 8-ft. basement area costs \$3,700, including shower and dressing room.

Puutalo also offers prefab saunas (\$349 to \$942 plus shipping charges), not including concrete flooring and a stove. The higher-priced model, 26 ft. by 16 ft., has a steam room, wash room, and large dressing room.

If you want the full treatment, buy an authentic sauna stove, complete with special rocks (boiling water thrown on heated stones produces the steam), thermostat, and gauges. Karjalan Sahko, Inc., of Finland sells them for \$220 to \$330, plus shipping charges.

For fanatics: try prefab sauna cottages with one to three rooms, completely equipped (available here, \$1,950 to \$5,000). Or a "saunamobile"—a fully outfitted, 34-ft.-long trailer you can haul to camp or sports areas (Cecil Ellis, Middlefield, Conn., \$3,950).

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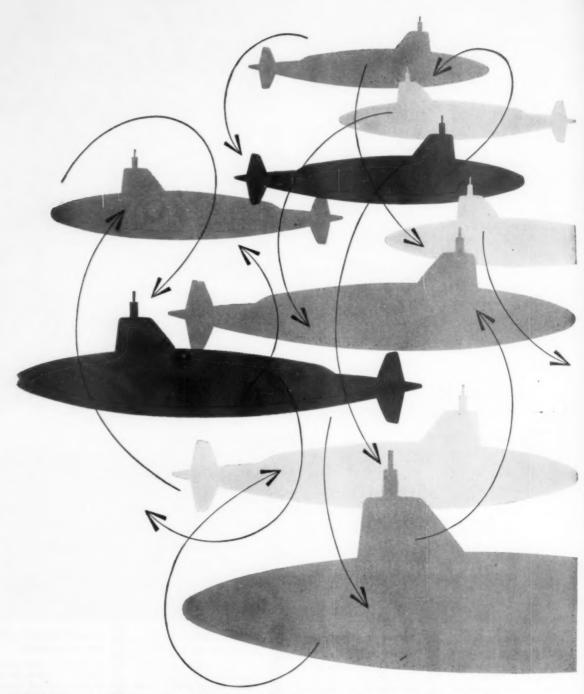
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In Research

Russians Seek More "Practical Experience" Before Putting a Man Into Space

Prof. F. Sergevev, a member of the Soviet Academy of Sciences, offered last week a semiofficial explanation of why the Russians have not, as vet, put a man into space. Russian scientists, Sergevev reported in Pravda, have the "means and conditions" to put a man aloft, but need more "practical experience" before the attempt

The space ship that carried the two Russian dogs into earth orbit and back to earth safely, according to Sergeyev, "is in excellent state and can be used for more flights." Before a man takes his first ride, however, more information is needed about both the launching phase of the operation and re-entry into the earth's

atmosphere.

The Russians now plan, Sergevev says, to follow up their first few manned earth-orbital flights with the launching of a semi-permanent earth-satellite station. Rockets designed for communication and supply of the scientists aboard the station already are available, he says.

Before the Soviets get a manned earth satellite in orbit, there is a very good possibility that they will try a "soft" moon landing, Sergeyev admits. The trick in landing a package of instruments on the moon's surface without damaging them in the landing will depend chiefly on the accuracy of the launching rocket's navigation system and the ability of the carrier's rockets to slow down the payload's speed as it falls toward the moon's surface. Both problems are thought to be solved, according to Sergevev. That means a Soviet "soft" moon shot could be attempted in the very near

New Drugs Found in Bulbs of Flowers May Help Treat Neuro-Muscular Disease

A newly discovered group of drugs that exist naturally in the bulbs of certain flowers may prove to be of material aid in treating a puzzling neuro-muscular disease, myasthenia gravis, which is characterized by a gradual weakening of the muscles.

Researchers at the National Institutes of Health say that studies with animals indicate that the new compounds-all derivatives of substance called lycoraminelook very promising in arresting progress of the disease.

The NIH research was stimulated by a Russian report that a drug called galanthamine hydrobromide had been found capable of relieving some neuro-muscular disorders. NIH scientists investigated this compound, which occurs in the daffodil bulb. They found that the galanthamine hydrobromide was less effective as a cure in treating myasthenia gravis than a number of drugs already in use for treatment of the disease. But when they extended their research further, they uncovered the group of related substances that now look so promising.

MORE NEWS ABOUT RESEARCH ON:

• P. 174—Industry keeps university reactors busy, causes Penn State to seek permission to operate a second machine.

Boost for Basic Study of Magnetism Seen in Compound's Odd Behavior

Du Pont researchers have discovered a metallic compound of manganese whose very unusual magnetic qualities suggest that a new approach may be opening up to the fundamental study of magnetism (BW-Sep.22'56, p134). The material has no immediate commercial application, but a number of industries might profit from

its research possibilities.

The special peculiarity of the brittle, gray materialchromium manganese antimonide-is that its magnetism seems to be a function of its temperature. When its temperature rises above a point-which depends on its exact chemical composition-the material becomes magnetic. As temperature drops below the point, the material once more becomes nonmagnetic. The critical temperature point varies over a range of several hundred degrees as the chemical composition is shifted slightly.

This characteristic is the exact reverse of most common materials. A substance is generally rated as magnetic if it is attracted to a permanent magnet at normal temperatures. Thus iron is magnetic, silver is not. And most magnetic materials lose their magnetism gradually at very high temperatures. For iron, magnetism disap-

pears at 1,420F.

Chromium manganese antimonide, on the other hand, loses its magnetism when temperature drops below the

critical point.

Apparently, the new material acts this way because the line-up of its inner magnetic forces depends on the distance between its atoms. When the distance is less than a specific point, the forces are aligned in a nonmagnetic pattern; if the distance is greater, they swing into a magnetic pattern. The compound contracts and expands with temperature changes, just like other substances, and its range of contraction includes the dimension at which its magnetic forces shift.

Du Pont came on the compound in its continuing study of magnetism and magnetic substances. company says it is interested in magnetism as a maker of chemicals, because magnetic materials have many practical uses and because knowledge of magnetic properties can answer many questions about matter. Since atomic structure controls magnetic properties, a thorough understanding of magnetism should, theoretically, yield more precise knowledge about the fundamental particles of matter than the most powerful microscope.

Since they came on chromium manganese antimonide, the du Pont people have found several other materials that share the compound's odd on-and-off magnetic

characteristic.

The du Pont scientists credited with discovering the peculiar magnetism of chromium manganese antimonide are Drs. Thomas J. Swoboda, Tom A. Bither, William H. Cloud, Howard S. Jarrett, and Monroe S. Sadler.



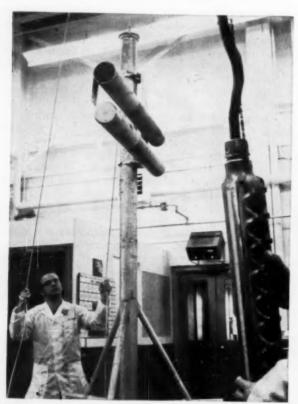
PENN STATE REACTOR has done special contract job for Bell Labs. Here technician fits capsule that Bell prepared into the reactor loading device.

Industry K

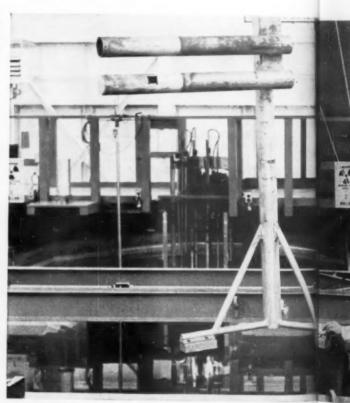
Pennsylvania State University, a pioneer in nuclear research, has asked the government for permission to operate a second atomic reactor. The move symbolizes a major trend in nuclear research and development. The universities are getting deeper into the business of doing contract research under the pressure of demands from individual companies.

Penn State is typical of the trend, and badly needs the second research reactor. The one it has is overloaded with projects, mainly educational. The second, for which it now seeks an O.K., is larger and more powerful, and will permit the university to undertake much more sophisticated projects. It's located at Quehanna, about 50 miles from the campus, and has been used by Curtiss-Wright, which has donated it to the university.

• Priorities—The university still gives priority to educational jobs on the campus reactor, but also uses it for industry. Thus early last week, Bell Telephone Laboratories completed an investigation of the effects of radiation on semiconductors. Bell has a contract with the Air Force, which wants to



LOADING DEVICE is positioned over the reactor pool in which material to be tested will be submerged.



LOWERING RIG is next step. Rig was specially designed for the Bell Lab job. Penn State's first reactor is a low-powered machine, and

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Y Keeps Campus Reactors Busy

know how semiconductors will stand up in a nuclear propelled rocket.

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"We don't have as much industrial work as we had in 1955," says N. J. Palladino, head of the Nuclear Engineering Dept. "At that time only two colleges had nuclear reactors—Penn State and North Carolina State. Now the competition is much greater. Dozens of universities have built research reactors and are doing jobs for industry."

The catch is that the jobs now are much more sophisticated. As nuclear technology has expanded so have the demands of industry. That's why Penn State wants to expand its equipment.

The university built its first reactor in 1955, with \$325,000 of its own funds. Many of the components were built by faculty members and students. Students also built the structure that houses the reactor. The Atomic Energy Commission provided enriched uranium fuel at no cost.

• Make-Ready—The first year of operation was devoted chiefly to tests and crew training. Until this year the reactor's peak power was 100 kw. In June, Penn State got permission from AEC to increase peak power to 200

kw. By comparison, the Quehanna reactor, which the university is now planning to operate, has a capacity of 4,000 kw.

A few years hence, Penn State probably will have a third, even more powerful reactor, too. It is a member of a group that is building a small power reactor at Saxton, Pa. and the group has agreed to turn over this reactor to the university after five years of experiments. A part of its initial contribution to the project, the university will train crews for the Saxton reactor.

Westinghouse Electric Corp. is building the reactor for the Saxton plant. It will be a pressurized water reactor designed to deliver 20,000 kw. of energy. The plant will be operated as a unit of the Pennsylvania Electric Co. system.

• Modest Charges—Students and faculty members are not charged for using the Penn State campus reactor unless they are being paid for their work by industry. Charges to industry are modest, ranging from \$1 to \$50 per hour. Projects that require no change in the operation of the reactor get the lower fees. When all other work must be taken

from the reactor, the \$50 rate applies. Palladino says he is seriously considering an increase in these fees.

We don't even meet our operating costs at the present fees," he says. "I think we should at least do that."

In addition to Bell Labs, several other companies have recently used the university's campus reactor. HRB-Singer has a continuing investigation of the effects of radiation on materials going on at the reactor. Philco's Lansdale Tube Div. is exposing transistors to radiation for the Signal Corps. A similar study is being conducted for International Business Machines. The Naval Air Development Center receives irradiated isotopes for use in antisubmarine warfare from Penn State. Allis-Chalmers Mfg. Co. tested boiling water fuel elements for a plant it is building. Pittsburgh Plate Glass Co. gets tracer materials from the reactor to check on its glass products.

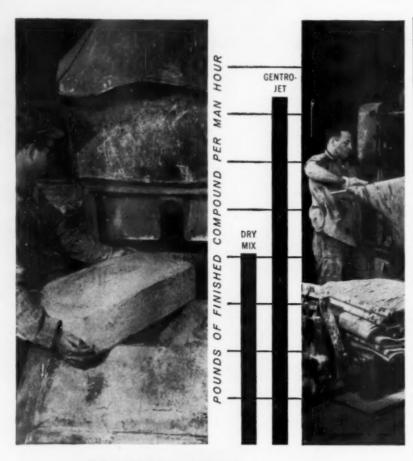
• Keeping Busy—In 1959, the reactor was started and shut down 496 times; it was in operation a total of 1,666 hours. This included the hours it operated during a six-week course Penn State staged for AEC and the



the university is seeking permission to operate another, more powerful one.



BLUE GLOW from the reactor helps lights on the pool floor to illuminate what's happening as the rig moves the semiconductors next to the reactor core.



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. . . the reactor operates at the bottom of a pool of water. The water prevents radiation from escaping . .

(STORY on page 174)

Some

American Society for Engineering Education. The course was given for instructors from technical institutes. A four-week course also was given for industrial scientists and engineers.

Penn State also participates in AEC's program for helping foreign technicians. A group of Turkish students is conducting experiments in the reactor

At its new Quehanna reactor, Penn State already has leased five hot cells (rooms where radioactive materials are handled remotely) to the Martin Co. Curtiss-Wright is continuing to use some of the other hot cells. The lease is subject to AEC approval, but that is almost certain to be given. Martin will use its hot cells to carry out experiments with devices that generate elec-

The university, however, will operate the Quehanna reactor. Like the campus reactor, this is a swimming pool type. That is, the reactor operates at the bottom of a pool of water. The water prevents radiation from escaping.

· Personnel Needs-Palladino figures he probably will not have the trained personnel to operate the Ouehanna reactor full-time in the near future. Crews are being trained at the campus reactor. But because the Quehanna unit is so much more powerful, Penn State will be able to carry on a wide variety of experiments. Educational jobs still will get priority, he says. But as soon as the news of the university's second reactor gets around, he is almost certain to receive many more requests for work from industry.

"We do what we can for Pennsylvania industry because we are the state

university," he explains.

The university's 15,000 students already may take graduate degrees in nuclear science. Operation of the Saxton power reactor will give them first hand experience with reactor power plant operations.

Curtiss-Wright operated the Quehanna reactor while it was filling a government contract. When the contract expired, it donated the reactor to Penn State, whose staffers had helped it start the reactor. Curtiss-Wright still maintains its other laboratory facilities at Quehanna.

· Expansion Funds-The state of Pennsylvania has granted the university \$444,000 to expand its campus reactor facilities. Hot labs, more offices, and chemical labs will be added to the Wherever you live whatever you do...

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ENGINE BEARINGS standard of quality for automotive replacement in addition, Penn State has asked the National Science Foundation to put up \$168,000 to buy other support equipment.

Waste disposal poses no great problems for the university. A 4,500-gallon stainless steel tank is used to store liquid wastes at the site of the reactor. Other wastes are buried in a fenced location far from the campus.

Six members of the staff have AEC licenses to operate the reactor. Five others are in training to apply for licenses

licenses.



New Standard for Meter

Last month, in Paris, the world adopted a new international standard of length. The new standard—a wave length of light—replaces a platinumiridium meter bar that has served as the world length standard for over 70 years. The light wave length is obtained in a krypton-86 lamp, operated at minus 345F—such as the lamp being adjusted by a scientist in the picture above.

The adoption of a new length standard is of great importance to those engaged in precision measurement in industry. Until now, the world has relied on the distance between two engraved lines on the International Meter Bar kept in a vault in Paris. Duplicates of this standard bar were maintained in standards laboratories of other countries of the world, including the National Bureau of Standards in Washington. But from time to time, it was necessary to return these duplicates to Paris for recalibration. Some scientists also had grave doubts about the stability of the International Meter Bar.

The new definition of the meter relates it to a constant of nature—the wave length of a specified kind of light that can be reproduced with great accuracy in any well-equipped laboratory.



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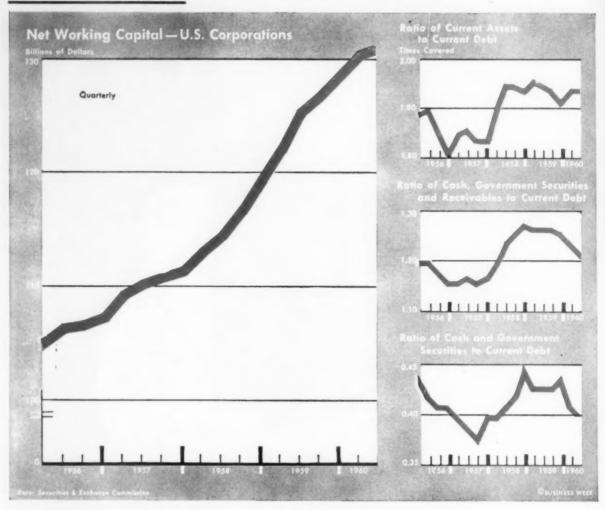
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A Record Total-But Less Gravy

The main chart above reflects the uncertainties that cloud this year's financial picture. Although net working capital of U.S. nonfinancial corporations climbed once more to a record high in the second quarter, the \$500-million gain was the smallest quarterly increase since the last quarter of 1957.

The manufacturing group accounted for all of the increase, while the working capital position of other major industries indicated little or no change.

At the end of June, current assets of business enterprises (excluding banks, savings and loan associations, and insurance companies) topped current liabilities by a record \$131.2-billion. This was \$5.9-billion ahead of the same period in 1959, despite last year's very favorable profits picture.

But working capital, taken alone,

will never give a true picture of the liquidity of a corporation, or of business as a whole. What's really important, as any experienced credit man will admit, is the composition of the working capital at any given moment.

• Not So Glittering—When viewed in terms of corporate liquidity (small charts), this year's score loses some of its luster:

• Current assets covered current liabilities only 1.94 times, matching the first-quarter ratio, but falling way below the 2.01 to 2.19 range of the 1945-50 period. First quarter, 1959, posted the most recent high—1.96.

• Cash and near-cash (cash, government bonds, and receivables) covered current debts only 1.22 times at June close. Fourth quarter, 1958, hit a much healthier 1.28 ratio, while 1945 holds the record with 1.55.

• Cash and government bond coverage alone declined even more sharply to 0.40 of current debt in the second quarter, the lowest since the first quarter of recession-ridden 1958. At the close of World War II, this ratio stood at 0.93, the all-time high. The postwar low of 0.38 occurred in the third quarter of 1957, as the economy hovered on the brink of the 1958 recession.

These dwindling ratios mean that actual liquidity is declining, in spite of the huge gain in working capital. Major downward pressures come from rising capital spending while profit margins are pinched by mounting operational costs. Massive spending in new plant and equipment eats increasingly into cash earnings. During the June quarter, capital requirements were about \$10-billion (\$8.7-billion in plant and equipment). Of this, 80% came from



5 to 6 completely-equipped mobile homes, offices or schools are built each day . . . a sharp increase from the 2 per day of 1958. Plant employs 170 people, plans—steady—increase—in production and personnel.

Production and Distribution Problems Solved by a New Plant



Production of mobile units starts with building of frame—ends with ready-to-sell home, school or office. Despite many skills involved, flexible operations permit production of many custom-equipped units.



Magnolia plant covers 42,000 sq. ft. of an 18-acre tract — is served by railroad, 2 major highways. Mild Virginia climate assures uninterrupted year-round production. Nearby 90,000-acre lake offers boating, fishing.

in VIRGINIA

In considering a new plant, Magnolia Mobile Homes Corporation sought efficient production and a centralized location in their marketing area. South Hill, Virginia, completely met both requirements. Local labor, trained at the plant for such skilled work as welding and electrical installation, has proven extremely willing and productive. From its Virginia plant Magnolia can economically distribute to the New England, Middle Atlantic and Southeastern states. Biggest market for their mobile homes and offices is Virginia itself.

Magnolia officials praise the all-out cooperation of state and local government in helping them locate at South Hill. If you are looking for a similar cooperative, pro-industry community, phone, wire or write . . .

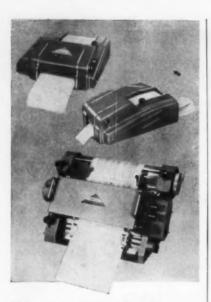
C. M. Nicholson, Jr., Commissioner Division of Industrial Development and Planning

Virginia Dept. of Conservation and Economic Development

State Office Bldg., Richmond, Va. Phone MIlton 4-4111 Ext. 2255

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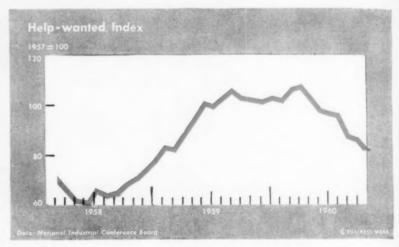
For systems designers, Anelex Printers provide the widest possible choice of capabilities, because standard production modules can be combined to meet almost any specifications as to: operating speeds (up to 2,000 lines per minute), number of columns (8 to 160), number and type of characters per column (up to 66) dimensions of preprinted forms (up to 20" x 22").

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ANELEX CORPORATION



internal sources—depreciation, accruals, and retained earnings. External sources provided the balance of funds needed\$500-million in net new stocks, and over \$15-billion in long-term borrowings.

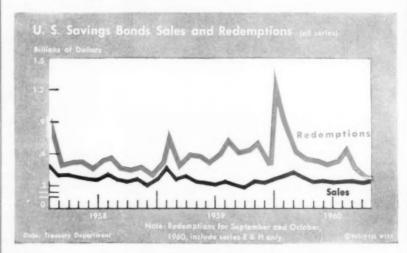


Classified Ads Show Job Climate

Add one more business indicator to your list of trend-spotters: the National Industrial Conference Board's Helpwanted Index.

NICB's economists have concluded that the level of help-wanted advertising at any given time reflects employers' demands for labor. So they are computing a monthly index based on the volume of such advertising in the classified sections of leading newspapers in 33 major labor market areas. The result: a reasonably accurate reflection of the job climate, available almost concurrently with Labor Dept. figures on employment and unemployment.

As the chart above shows, helpwanted advertising declined again in September, as the economy continued to soften.



Fewer Sales, Fewer Purchases

The rate of redemption of savings bonds slackened considerably in the past three months, following a run that peaked in December, 1959, when 1948 F and G bonds were exchanged for close to \$700-million in 43% marketable notes.

Some credit for stemming the flow goes to the higher, more competitive rates on savings bonds that went into effect last fall. The optimum yield on E and H bonds is now over 4%, compared to the top 3% rate of commercial banks.

Judging from bond sales, which have averaged only \$350-million a month since April, the new rates hold little attraction for new buyers.



Bendix Sonic Energy Cleaners clean, rinse and dry a thousand surgical instruments an hour—and, compared to previous methods, achieve microscopic cleanliness in a fraction of the time at less cost,

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In the war against dirt and disease, hospitals have always fought to achieve the greatest possible degree of cleanliness. Today, the fight for dependably clean surgical instruments is being won with a new "weapon"—Bendix® Sonic Energy Cleaning.

b

Former cleaning methods—laborious hand scrubbing or mechanical washing—were not only time-consuming and costly, but frequently ineffective in attaining the microscopic cleanliness prerequisite to certain sterilization.

Five years' experience in hospitals proves that Bendix Sonic Energy Cleaning gets surgical instruments meticulously clean, does the job ten times faster, and at a substantially lower cost than previous methods. To do this job so efficiently, Bendix Sonic Energy generates high-frequency cleaning power that reaches into, and

cleans, even the tiniest crevices of surgical instruments when placed in a water-detergent solution. Soil on metalware, glass, and rubber tubing also succumbs before it.

This is why hundreds of hospitals are today relying on Bendix Sonic Energy to improve and speed the cleaning of surgical instruments—a monumental task involving some 90,000 instruments per operating room each year. If your hospital does not have the efficiency and time-and cost-saving benefits of Bendix Sonic Energy Cleaning, we suggest you get in touch with Wilmot Castle Co., Rochester, N. Y., a subsidiary of Ritter Company, Inc., our exclusive distributors to the hospital field.





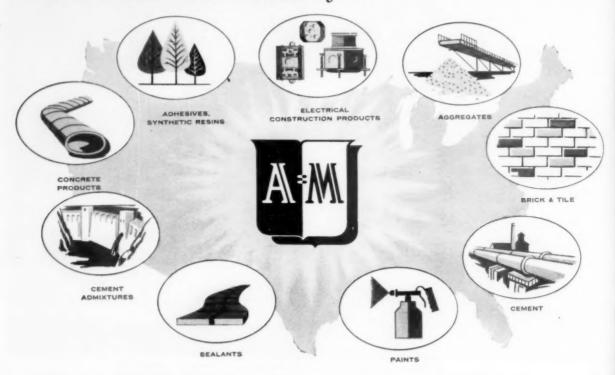
The average operating room has about 90,000 surgical instruments to be cleaned every year. In many hospitals, Bendix Sonic Energy Cleaners easily perform this difficult task.

Bendix Sonic Energy Cleaning is also filling a long-felt need in industry for faster, better, lower-cost cleaning of precision parts and assemblies. In missiles, for instance, even submicroscopic contamination can result in malfunction. All along the industrial front, Bendix Sonic Energy Cleaners are doing a more efficient job.

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Demand for American-Marietta construction materials is keyed to the growing requirements for new highways, bridges, water, sewer and drainage facilities—and the continuing rise in public, commercial and industrial building.

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tractors, A-M's diversified construction materials have contributed to improved quality standards in all phases of construction.

With an emphasis on economy, builders everywhere welcome American-Marietta's ability to maintain prompt delivery schedules through its strategically located plants, mills and quarries.

The startling dimensions of America's economic growth and expanding markets have been projected in a special report, "The Years Ahead: 1960 To 1975." The significant conclusions of this professional study have far-reaching implications for every thoughtful executive. You are invited to send for a copy. Address Department YA, American-Marietta Company, Chicago 11, Illinois.

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CANADA

Ottawa Reappraises State Corporations

Take one quick look at the annual report of Polymer Corp., Ltd., a Sarnia (Ontario) producer of synthetic rubber, and you will see what looks like the success story of a dynamic young Canadian company. The figures show that Polymer, founded in 1942, made a clear profit last year of \$3.7-million.

But a couple of weeks ago the Canadian government set up a three-man Royal Commission that will cast a beady eye on the operations of Polymer and on 35 other Canadian corporations. The commission will have power to recommend that these companies be sold, liquidated, or subjected to stringent economies. That's because Polymer and the 35 others—despite their boards of directors, their presidents and vice-presidents, their issued (but not traded) stock, their glossy annual reports, and their whole free-enterprise facade—are owned and operated by the Canadian government.

Canadian government.

• Varied Crown Enterprises—All 36 go by the generic name of crown corporation. But not all are solid industrial

enterprises like Polymer.

Thirteen of the 36 are noncommercial, essentially regulatory bodies, such as the Canadian Wheat Board, the St. Lawrence Seaway Authority, the Canadian Maritime Commission. These correspond closely in their functions with U.S. government regulatory groups.

Another two-the National Gallery of Canada and the National Research Council-handle those functions of the arts and sciences that governments all

over the world support.

It's the remaining 21 that play a large and active role in Canada's economy. The profit that the government draws from these corporations—a net of \$43.7-million last fiscal year—is hardly significant compared to the \$2-billion worth of profits made by all Canadian industry in the same time. (And to some extent the profit is false, for the \$52-million that Canadian Broadcasting Corp. needed as a Parliamentary grant this year to keep going is not reckoned as a deficit.) But the influence of these corporations on the country's economy is of much greater proportions.

• Leading Roles—This is easier to judge when you consider the roles of a few of the major crown corporations:

Canadian National Rys., with 25,000 miles of track, nationwide telegraph and hotel services, and 100,000 employees.

• Trans-Canada Air Lines, which by 1961 will have \$110-million worth of new jet and turbo-prop airplanes on its Canadian and transatlantic routes.

 Eldorado Mining & Refining, Ltd., which operates its own uranium mines, processes—at a profit—all uranium mined in Canada, and exports



BROADCASTING is \$90-million-a-year business for Canadian government, but CBC, which gets \$40-million in advertising revenues, still has \$50-million deficit.



TRANS-CANADA AIR LINES, government owned domestic and international line, will soon have a fleet of new jet and turbo-prop planes worth \$110-million.



CANADIAN NATIONAL RYS., biggest of the Canadian crown corporations, has revenues of over \$700-million a year; also has big deficit—\$43.5-million a year.



ELDORADO Mining & Refining, Ltd., is big government money-maker; last year had \$4-million net profit from its work of mining and refining Canadian uranium.



ATOMIC Energy of Canada, Ltd., makes atomic reactors, produces and sells fission byproducts like isotopes, makes profit (last year, \$500,000) for government.

"National Defense must not wait

so we use Delta Air Freight"



Convair, Ft. Worth, Texas, uses Delta Air Freight to help meet production deadlines and testing schedules for the B-58, America's first supersonic bomber.

"Every minute test planes are grounded, our national defense program is affected,' says Sam Keith, Traffic Manager. "Delta Air Freight plays a vital part in the B-58 production and testing program, by reducing the transit time for high-priority material between our Ft. Worth plant and distant test sites."

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Delta operates all-cargo flights and in addition carries freight on every passenger flight, including Jets. All-Cargo flights serve Atlanta • Chicago • Cincinnati · Charlotte · Dallas · Detroit · Houston • Memphis • Miami • New York New Orleans • Orlando • Philadelphia.



GENERAL OFFICES: ATLANTA AIRPORT, ATLANTA, GA.

finished uranium products for all Canadian uranium producers.

· Canadian Broadcasting Corp., the country's only national radio and TV network, which spends \$90-million a year on its operations.

· And, of course, Polymer.

· Pragmatic Socialism-This looks like large-scale state socialism. And it is. The reasons for it lie in Canada's distant as well as its recent history

In Canada's earliest years of industrial growth, at the turn of the century and in the first decades of the 1900s. there simply wasn't enough private capital available to open the thinly populated central and western areas. Transportation and land development were jobs that only the resources of the federal government could handle. Canadian National Rys., an amalgamation of three privately owned railroads that went bankrupt around the time of World War I, grew up as a state-run

system in just this way.

• Depression, War Pressures-When the depression of the 1930s hit Canada. a lot of the industrial fabric of the nation began falling apart. Small local airlines, spread across the country, collapsed rapidly. The government's response was the formation, in 1936, of Trans-Canada Air Lines as a government-owned and operated enterprise. Canadian Broadcasting Corp. was set up, also in 1936, because private capital in the Canadian radio industry was much too small to establish any national network

With World War II came the greatest rush of government-in-industry in Canada. Heavy demands were made on the country's industrial plant, and in more than a score of cases the only way to meet those demands quickly was for the government to set up its own industrial and supply corporations. The so-called "industrial czar" of Canada. C. D. (for Clarence Decatur) Howe, wartime Minister of Supply, had virtually a free hand in devising ways for the country's industry to meet the war's demands, and he set up 26 crown corporations. Only two of them survive: the rest were necessities for wartime only. But the survivors are among the biggest of the crown corporations operating today: Polymer and Eldorado Mining & Refining, both of which have long since returned the government's original investments in them.

I. Businesslike Operation

That such government operations should have been set up is not, on the surface, unusual. Every major industrial nation has, at times of stress, in war and in depression, set up similar agencies of government to get work done. What is unique about Canada's crown corporations is that they have so many

of the trappings of free-enterprise companies, so much freedom from interference in their operations by the government of the day, and so close a connection with private industry.

· Industrialist Directors-Their boards of directors are almost always made up of men from among the top ranks in private industry. Polymer's board, for example, includes the president of Chrysler Corp. of Canada, Ltd., the chairman of a Canadian steel mill, a retired mining magnate, the former president of Lever Bros. Co.'s Canadian subsidiary. The directors of Canadian National Rys., Trans-Canada Air Lines, and the Canadian Broadcasting Corp. are made up of similar slates of industrialists and professional men. They are not members of the civil service or of the administration. They don't have to resign wholesale when a new government takes office: in fact, many crown company directors held their jobs after Canada's change of government from Liberal to Conservative in 1957.

In their dealings with employees the directors and executives of the crown companies are as free-or as fettered -as the men who run any private company. Government intervention in a strike against a crown corporation is as rare as government intervention in a strike against any other company. Canadian National Rys,'s employees, for instance, belong to the same broad range of operating and non-operating unions as railroad workers in the U.S., and they involved CNR in a long and bitter strike in 1950. Last year, Polymer Corp.'s employees went on strike. shut down the company for three months, and contributed to a large part of the over \$2-million drop in Polymer's earnings as compared with 1958.

· Responsibility-But where a director in private industry is finally responsible to the broad concept of "the stockholders," the director of a crown corporation is responsible to somebody much more concrete-the cabinet minister who has been put in charge of the corporation. The cabinet minister doesn't sit in as chairman of the board, but all the big decisions-on finance, expansion, modernization-must go to him for approval. And he, in turn, is finally responsible to Parliament-which isn't too onerous a responsibility so long as his party has a solid Parliamentary majority.

Almost always these days new directorships are filled by men selected by a crown corporation's surviving directors. They put up their selection to the cabinet minister in charge and usually get his approval automatically.

· Directors' Rewards-A director's fees are small; they vary from one corporation to another, but they are never large enough for a man to make his directorship a full-time occupation. The job is, in many cases, almost an

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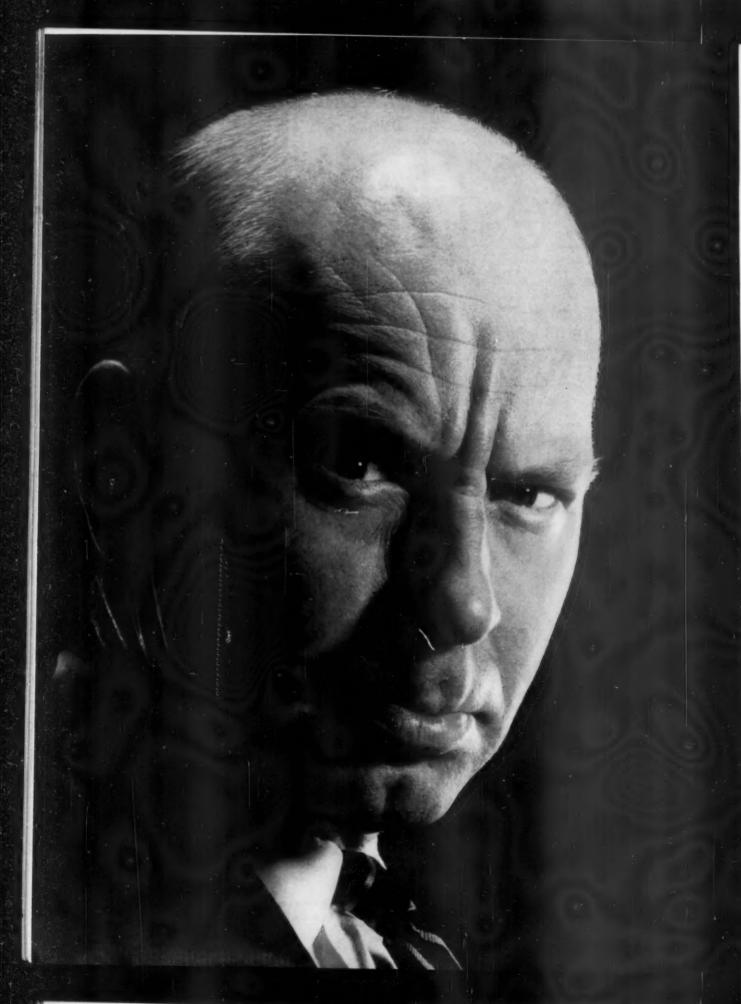
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MAIL BY DECEMBER 10, 1960"
"FOR DELIVERY IN YOUR LOCAL AREA,
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honor, something like a junior-grade knighthood. Early in 1953, Polymer had as one of its directors the then president of Chrysler Corp. of Canada. When that Chrysler man was transferred back to Detroit three years later and his place at Polymer had to be filled, the other board members turned again to Chrysler of Canada, put its new president on their board. Now, it seems, the job as head of Chrysler of Canada pretty well means a directorship in Polymer, too.

When a man is picked to be a crown corporation director there's always a certain amount of ceremony and formality about his appointment. Though the government owns the corporation lock, stock, and barrel, a new director is presented with a block of shares in the corporation. Thus, the government complies with the Canadian Companies Act, which calls for all directors to hold shares in their company. But the new director instantly turns his shares face down and signs them back to the government; the investment lasts practically no time at all. · Taxes and Dividends-The formality of complying with the Companies Act gives crown corporations some responsibilities that are more positive. Unlike federal operations in the U.S., a Canadian crown corporation must pay federal taxes on its income and meet all the provincial and local taxes that a

private corporation must pay. At the end of their company's financial year, the directors of some of the crown corporations meet to declare a dividend-for the benefit of their sole stockholder. Though the government owns the whole operation it doesn't always get the entire year's earnings of a crown corporation. Polymer's directors last fiscal year paid out in dividends only \$3-million of their \$3.7-million earnings. They kept the rest for Polymer's reserve. But there, their freedom of action ends. Before they can spend their reserves, the directors must get the minister's O. K.

II. Profits and Losses

Not all the 21 crown corporations that are in commercial business make profits, so not all their directors have an opportunity to go through the formality of distributing dividends. However, one way or another, 13 of them did come out ahead at the end of the last fiscal year by amounts varying from a couple of hundred thousand dollars to a whopping \$89-million for the Bank of Canada, the country's central bank.

• Suspect Profit—There is some doubt, though, about the legitimacy of the profit claimed by a few of them. Trans-Canada Air Lines' records, for example, show that this crown corporation

wound up last year with a net profit of \$150,000. This record, however, is suspected by many Canadian businessmen. The reason is that TCA gets from the government a highly accelerated rate of depreciation.

Despite this, there is a solid record of profit-making among most of those 13. Unhappily for the record, though, those crown corporations that do lose money lose it in enormous wads. Canadian National Rys. wound up last fiscal year in the red by \$52-million.

Among some of the money-losers, "deficit" is a dirty word. The CBC, which makes \$40-million a year from advertising revenues and spends about \$90-million a year for its operations, does not consider that \$50-million gap as a deficit. Says CBC Vice-Pres. Ronald Fraser: "It's not correct to say that we operate on a \$50-million deficit. Rather, we submit [to Parliament] a bill for services rendered. We turn out 100,000 radio and TV programs a year, preserving a Canadian outlook in Canada." That "bill for services" is met each year by a Parliamentary grant from general revenues to the CBC.

III. Valuable Interchange

One of the great lessons of modern democracy is, of course, that a bureaucracy, given time, will develop a life of its own that often seems virtually uncontrollable by the congress or the parliament that set it up. This probably contributes something to the autonomy of Canada's crown corporations. But these bodies were given a good slice of autonomy at the moment they were created. The boards of directors, dividends, and so on were built into them not with the idea of bamboozling the citizens of Canada into the belief that state socialism doesn't exist in Canada. The crown corporations were set up the way they are for quite pragmatic reasons.

• Chief Architect—The architect of almost all of them was C. D. Howe. Today, at 74, he has retired from government. Looking back at the record, he says: "The crown corporations did not and do not represent any change at all in the philosophy of government in Canada. They came into being to meet urgent needs. The motive was always pragmatic, never ideological."

For the same pragmatic reasons Howe devised the structure of the corporations. To run them he had to call upon many of the top industrialists in Canada. And to give these men an administrative structure they would be familiar with, he decided to keep the corporations out of the civil service atmosphere of the already established government departments. Thus come the boards of directors and the noncivil service status of the directors, the



American 4-door Super Sedan—For 1961 the Rambler American is more compact outside, yet has room for six average adults inside. A Rambler American Custom swept to first place over all other compacts in the 1960 Mobilgas Economy Run! Also available in 2-door sedan, 2-door business coupe, 2- and 4-door station wagons.

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MAIL BEFORE DECEMBER 16. 1960

managements, and all the employees. "The existing government departments were run by civil servants who had no knowledge of production and manufacturing methods. . . The crown corporations' officers and directors simply wouldn't have had the freedom of action under direct departmental administration." says Howe.

istration," says Howe.

If the crown corporations promote the growth of government-in-business they also promote an interchange, for through the men picked to lead them there is also a good deal of business-ingovernment in Canada. Scores of the men in the top ranks of Canadian business have served-and many still are serving-as directors or officers of the crown corporations. This has bred a familiarity among these business leaders with the ways of government and an equal familiarity among the leaders of government with the ways of businessmen. During and just after World War II the interchange of men between the crown companies and private business was much more frequent than it is today, now that so many of those wartime crown companies have gone out of business, but there is still some coming-and-going.

• Mutual Benefits—In dozens of not very tangible ways—in binding together a still fairly new society—this has probably benefited Canada. In some tangible ways—in tax and tariff policies, and in political support—it has probably benefited the businessmen and the politicians just as much. In some countries this sort of thing has led to the growth of a static and stultifying "establishment" but so far, at least, Canada's development has moved fast enough to prevent that.

IV. Official Scrutiny

For the next two years this whole structure will come under the eyes of the three-man Royal Commission that was set up recently to study government agencies, departments, and corporations. It's the commission's job to recommend to Parliament, by September, 1962, what should be done with these 36 government corporations.

Liquidation Candidates—There's little doubt that it will call for the liquidation of some of the crown companies. It's possible to pick two certainties for dissolution right away: Park Steamship, Co., Ltd., which exists only as a small bank account and conducts no business at all, and the Halifax Relief Commission, a useless hangover from 1917, which may be dissolved even before the commission investigates it.

The regulatory corporations will probably remain as they are, though there's a good chance some will be under stiff pressure to cut their costs of operation. The transportation and

communication entities—CNR, TCA, Canadian Overseas Telecommunication Corp.—and the financial companies— Canadian Farm Loan Board, Central Mortgage & Housing Corp.—will probably not be changed in many ways.

Already, the sale of the Northern Ontario Pipe Line Crown Corp. is in the cards; the privately owned Trans-Canada Pipe Line Ltd. has an option to buy it. (At present Trans-Canada rents this government-owned line, which was built across a barren stretch where a line could not be financed privately.)

Canadian Broadcasting Corp. will probably come under some attack. Private capital is building up in Canada's broadcasting business, and commercial regional networks are growing in size and power. Canada's broadcast licensing agency has been slow to permit them all the growth they want, and CBC as sole operator of national networks, isn't likely to give up its monopoly without a battle.

monopoly without a battle.

• Prime Targets—But it's the manufacturing crown companies—and particularly the two profit-makers, Polymer and Eldorado Mining & Refining—that are likely to have the roughest going in the investigation. The odds are that the commission will recommend that they be sold. In Canada, as in the U. S., businessmen see no reason why the government should engage in any profitable business, except central banking.

Offers have been made for Polymer. Ventures, Ltd., a mining and investment trust, offered \$75-million for Polymer a year ago, but the directors—and the government—turned it down. The commission may well recommend that another offer be accepted.

Eldorado may be in even hotter water before the commission. Ever since the Canadian uranium industry turned sour (BW-Mar,12'60,p117), the remaining private companies in uranium mining have, in turn, been sour about Eldorado's activities. It dominates the uranium mining industry and has a monopoly on uranium refining. It has snapped up a couple of smaller uranium mining companies that were caught in an overproduction squeeze and had to sell their contracts. Eldorado's unbureaucratic eagerness for more business had rankled the remaining companies and they are already demanding that the crown company be sold to private busi-

But if some of the crown corporations disappear in the next few years it will not mean that Canada has come to the end of an era of government-in-business. Transportation and development of sparsely settled areas are likely to be tasks beyond the capacity of private capital in Canada for many years, and the government will have to handle the job. END







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Air conditioning paid for itself in three years through greater employee efficiency in their Norwalk, Conn. plant

"We would never plan another building that didn't include air conditioning," states Mr. George Huff, Director of Plant Engineering at Perkin-Elmer Corp., Norwalk, Conn. "Since we started to install air conditioning for purely comfort reasons in 1956, it has brought us a wide variety of benefits.

"Air-conditioned work areas help us to attract and keep the high-caliber personnel we need to produce precision optics, optical systems and various types of analytical instrumentation. In our high-salaried engineering and design areas, for example, air conditioning lowered costly 'idle time' considerably. In our machine shop it reduced a rust problem from perspiration. We also experienced fewer complaints and less employee irritation during hot weather. Air conditioning actually becomes an extremely important 'fringe benefit' to employees,

And the increased efficiency alone paid off our invest-

Perkin-Elmer is typical of the many companies who have discovered that air conditioning can not only be economical, but profitable as well. Most air-conditioning systems are charged with Du Pont Freon* refrigerants—known for their safe, trouble-free performance.

For information on how air conditioning will help your business, contact an air-conditioning equipment manufacturer or your nearest air-conditioning contractor.



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

^{*}Freon and combinations of Freon- or F- with numerals are Du Pont's registered trademarks for its fluorocarbon refrigerants.

New Applications For Piezoelectricity

New ceramic compounds have enabled a New York inventor to use the principle in a scale, speedometer, air filter.

Down in his basement lab, located on Manhattan's midtown East Side, inventor Jerome Murray places on the floor a round, flat metal device that looks like a paperweight with an electrical cord attached to it (pictures), then hooks the cord to a voltmeter. When he steps on the gadget, the meter needle leaps to the right, registering several hundred volts of electrical energy. "I see I weigh about 600 volts," says Murray as he steps off. Surprisingly, there is nothing inside the metal case except a tiny cylinder of hard opaque material.

Murray, head of Jerome Murray Corp. and one of the country's busiest professional inventors, is demonstrating an experimental model of an extremely simple, almost pocket-size bathroom scale he has developed. As soon as he finishes designing a voltmeter face that reads directly in pounds, he will be ready to sell the new scale to a manufacturer.

Simple Phenomenon—The strange scale is one of several new products Murray is working on that are based on an unusual, though simple, phenomenon, which physicists call piczoelectricity. The principle works like this: When certain kinds of crystals or recently developed ceramic compounds (so called because they are baked and fired during fabrication like pottery) are squeezed or bent in any way, they give off a sudden jolt of electrical energy. Conversely, sending a charge through piezoelectric material causes it to change its shape.

Piezoelectricity is what makes many phonograph pickups work and is at the heart of military submarine detection equipment, as well as the ultrasonic cleaners that have been appearing on the market in the last few years. In a ceramic phonograph pickup, the movements of the needle in the record grooves put tiny amounts of pressure on the ceramic crystal, which in turn gives off the electrical signal that the speakers amplify. Ultrasonic cleaners use the principle in reverse. Running high frequency a.c. current through a ceramic crystal causes it to give off sound waves that will whip water into a cold boil, shaking the dirt off objects immersed in it.

· New Material-Besides the scale,

Murray has developed an auto speedometer, an electrostatic air filter attachment for air conditioners, and a new method of strobe lighting for photography, all based on piezoelectricity. He says that a new ceramic material led him to experiment with the piezoelectric effect. The material, made from lead zirconate titanate, is produced by Clevite Corp., Cleveland. Murray says the material is inexpensive, has an extremely long life, is highly heat resistant, and can generate voltages up to 20,000 volts, which is higher than most older materials are able to achieve. His applications all require fairly high

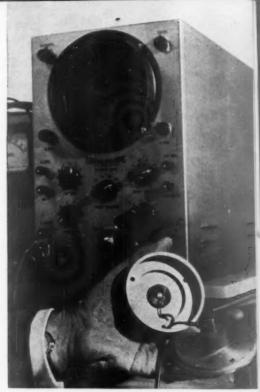
Clevite itself hasn't been indifferent to the high-voltage possibilities of its new ceramic crystals. Last month it announced a piezoelectric ignition system for small gasoline engines, like those in power lawn mowers and outboard motors. A squeeze on a tiny crystal delivers a powerful 20,000-volt spark to fire the engine. The ceramic crystal replaces the ordinary parts in an ignition—magneto, points, coils, and condenser. Clinton Engines Corp., Clinton, Mich., is beginning production of a line of gasoline engines using Clevite's new ignition.

• Simplified Equipment—In his applications of piezoelectricity, Murray has aimed at simplified equipment that eliminates moving mechanical parts.

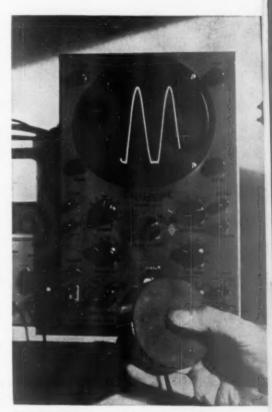
In his scale, for example, he was able to omit all hinges, springs, mechanical linkages, and counterweights. It can be substantially cheaper than any present bathroom scale, he claims, yet as reliable and accurate as a doctor's scale. It has another advantage, too. Since the meter is attached to the weighing unit by an electrical cord, you can hold the meter in your hand to read it while weighing yourself. This should be a boon for people with poor eyesight when they come out of the shower without their glasses.

Murray also plans to design large industrial scales based on the piezoelectric principle.

In the speedometer, all the parts that make up present models are eliminated –gear trains, flexible shafts, magnetic governors, and springs. Murray's speedometer works like this: He hooks up a cam and one of the little ceramic crys-



NEW SCALE consists of ceramic crystal attached to electric wire. Pressure on crystal gives weight in terms of volts.



SENSITIVITY of new scale is shown by hooking it to oscilloscope. Slight squeeze of hand changes shape of wave pattern.



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tals to the car's gearbox, so that the cam turns at the same speed as the driveshaft. As it turns, the cam squeezes the crystal, and voltage and current are generated. The amount of current is proportional to the speed of rotation. A wire connects the crystal to the dashboard instrument panel, where the current can be read as miles per hour. Murray figures his speedometer will cost about half as much as the older type to manufacture and

· Cheaper Airfilter-Electrostatic air filtering is the most effective kind, according to Murray, but he claims present equipment is just too expensive for widespread use. He says his air filter attachment does an even better job at

a much lower cost.

Present electrostatic air filtering equipment consists of a pair of screens in the air-conditioning unit that are electrically charged, one positively and one negatively. As air circulates through the conditioner, it passes through the screens, and any foreign matter in it. such as dust or even bacteria, is polarized and attracted to one of the screens like iron particles to a magnet. The units now on the market use power supplies made up of a transformer, capacitors, and a rectifier to charge the filtering screens. These cost up to \$7.

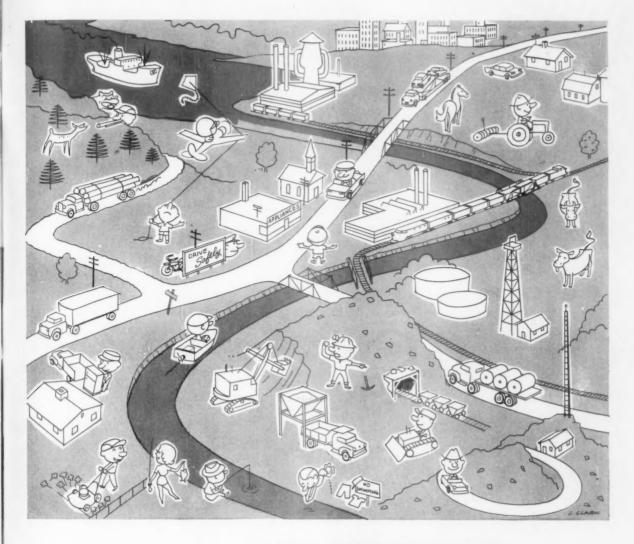
Murray's air filter attachment is much simpler and should cost only He fixes a cam around the conditioner's fan shaft so that it continuously applies pressure to a ceramic crystal wired to the screens. The crystal charges the screens with up to 15,000 volts of electricity.

Murray says patents are pending on all his new products, and he is already working with major manufacturers on the speedometer and the air filter. He also reports that a scale company has shown interest in the bathroom scale. So, it seems likely that these three items will appear on the market before too

Gas Bathroom Heater Makes Own Electricity

Lone Star Gas Co., a Dallas utility company, has designed a gas bathroom heater that has its own built-in thermoelectric generator to run a fan and automatic valve controls. Natural or liquid petroleum gas operates the heating element, a radiant-type burner. Part of the heat is converted by the generator's 42 thermocouples into 1.5 watts of electrical energy for the fan and con-

The heater is still in an experimental stage, but Lone Star claims that two manufacturers are looking over its production possibilities.



Why this Picture?

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The Big Hole Finds New Team to Fill It

Uris building firm and Rockefeller Center, Inc., join forces to put up office building on Sixth Avenue site in New York that had baffled a succession of would-be builders.

The huge hole in the ground pictured at the left is one of the choicest unfilled sites in New York City, just across from Rockefeller Center at Sixth Avenue and 51st Street. It is also a monument to the complexities, frustrations, and voracious calls for money that beset big building in a big city.

Pretty soon now-barring new calamities-a 42-story office building will be going up to fill the hole. But to get that far has taken 10 years since assembly of the site began and two years since the hole was dug. To the passerby, it has often looked as if the site were doomed to remain a catch basin for dirty rain water.

While the orphan site has lain idle -physically, that is, for the tortuous negotiations rarely stopped for more than a moment-the streets around it have echoed to the rattle and crash of office construction-666 Fifth Ave., the Time & Life Building, the new home office of the Equitable Life Assurance Society of the United States.

• Plans Drawn-Now the Big Hole seems ready to join the skyward push. Three weeks ago the builders-Uris Buildings Corp., and Rockefeller Center, Inc.-began poring over the first architect's drawings.

The heart of the story, though, is in the behind-the-scenes maneuvers of a formidable cast of builders and lenders. Here's the roster:

Equitable Life, which assembled the site and planned an office building, partly for income and partly to provide overflow space from its new office across

Peter B. Ruffin, half of Galbreath-Ruffin Corp., which built the steelsheathed Socony Mobil Building. Ruffin had to drop out as builder for

The Chase Manhattan Bank, which lent the money with which

William Zeckendorf, president of Webb & Knapp, Inc., bought the site from Equitable and planned to build a tremendous hotel. It was Zeckendorf who actually dug the hole.

Prudential Insurance Co. of America, which owns the hole today.

Uris Buildings Corp., a major New York builder, and

Rockefeller Center, Inc., which got

together where Zeckendorf left off, and is now getting ready to build.

Toots Shor, the restaurateur whose lease on a plot got him into the act.

All the men involved, except Shor, knew intimately the tangled world of pre-construction maneuvers-the site to be assembled piecemeal by purchase, lease, or swap, the plans to be drawn, the lenders, investors, and tenants to be found. For some projects, this can be routine, but not for the Big Hole on Sixth Avenue.

The story began in 1949, when what is now the site consisted of some 50 small plots, with little cabarets on the 52nd Street side, a mixed batch of stores on Sixth Avenue, and a row of brownstone tenements-in addition to Toots Shor's restaurant-on 51st Street.

Speculators had already snapped up a few of the plots, tempted by the nearness of Rockefeller Center across 51st Street, and by Fifth Avenue a few hundred feet to the east. The speculative buying went on for four years; prices jumped from around \$50,000 for a 70-ft. frontage to \$250,000 and up for less frontage than that.

I. Equitable Life's Project

The big timers moved in by 1953 when Equitable began to assemble the small plots. It was thinking of a 30story building with perhaps 400,000 sq. ft. of floor space, for rental and potential overflow.

Equitable picked real estate operator Anton L. Trunk as its negotiator. Trunk was an old acquaintance who was already busy buying plots for Equitable's home office across the avenue. Another real estate agent, Leonard J. Beck, was made property manager. Beck held a lease from the William Waldorf Astor estate on plots amounting to little less than half the site.

In 1954-55 Trunk made good progress, picking up leases and plots from tenants, independent owners, and real estate men who had speculated in the

• Shor's Lease-As early as 1954, it was clear that there would be one major holdout: Toots Shor refused to sell the lease, good till 1967, on the building that housed his restaurant. The build-



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Except for the size of his widespread truck fleet, Fred Hague, Sun Oil Company's manager of motor transportation, for example, could be considered typical of all truck-buying, truck-operating oil marketing management men. He is pictured here in two somewhat symbolic situations. One typifies his (and their) interest in the design and construction of new oil hauling equipment, including the components and materials used. The other emphasizes his (and their) unending effort to get the maximum safe and economical service out of every truck. Both these interests, and they overlap because construction and materials affect maintenance just as maintenance needs affect design, make Fred Hague and all the other truck-buying, truck-operating readers of NATIONAL PETROLEUM NEWS who spend that fifty million dollars a year for trucks prime targets for advertising of trucks and all the components, materials and equipment used in and on them.

But oil marketers are not only in the oil trucking business. They are also big buyers of stake, panel and specially-equipped trucks. The transportation of oil marketing equipment, lubricants, anti-freeze, LPG cylinders, heating equipment, tires, batteries, and a multitude of other products is a basic part of oil marketing operations. Besides that they buy the trucks used in the maintenance and service of oil marketing and heating equipment.

In short, it is not just oil trucks, or even trucks in general that oil marketing management men buy and are vitally interested in, it is every single product and service used in marketing oil. Storage tanks, valves and fittings, warehouse equipment, accounting machines, service station construction materials, lifts, compressors, lighting equipment, tools, tires, anything and everything used in the storage, transportation and merchandising of petroleum products is bought first, most and primarily by oil marketing management men. And, as no one of any objectivity can dispute, the best single way to reach them is through the advertising pages of NATIONAL PETROLEUM NEWS.

▲ Fred Hague, National Petroleum News reader and Sun Oil's Manager of Motor Transportation at one of his truck maintenance and repair centers.



▲ Fred Hague (left), on inspection trip to plant manufacturing trucks for Sun.



ing was exactly where Equitable wanted to put its main entrance.

Equitable had already bought the property for \$1-million from a trust supervised by Charles F. Noyes, Inc. But Shor had his long lease granted in 1939, when he built the restaurant as part of a deal that passed title to the Noyes trust.

Shor now says that Trunk offered him \$750,000 for the lease, "but why should I take that. It cost \$750,000 to build it." (Trunk denies he made an offer.) Shor adds that Beck also made an offer: "He came to me with a \$100,000 check and said I could have the balance of \$1-million in a month. I didn't want that either. What would I do for another restaurant?"

By the spring of 1955, Equitable was impatient to build. Acquisition costs were running above estimates; rental of part of the site for a parking lot was paying only a fraction of the taxes. So Equitable began to look for a builder, even though it did not have the Shor lease. Equitable offered an option on the job first to Beck but no firm agreement was ever reached.

• Ruffin Called In—Later in the year, Equitable's vice-president of real estate, Glenn McHugh, approached Peter Ruffin, whose Socony Mobil work Equitable had helped finance with a \$37.5-million loan. Ruffin accepted the role of builder though an option agreement wasn't signed until April, 1956.

Equitable and Ruffin agreed on a 60-story building to cost \$60-million. Ruffin would be the owner: Equitable would put up a \$40-million short-term construction loan, the maximum two-thirds of cost allowable under New York State insurance law. When the building was complete, Equitable would convert the loan into long-term mortgage bonds. Eventually, Ruffin would pay back to Equitable "an excess of the building's income when it reached a certain level." Neither Equitable nor Ruffin will make a statement as to what the level was.

In the April option agreement, Ruffin accepted a one-year deadline "to find enough tenants to justify a new building." Equitable wanted assurance of some tenants to make up the difference between its original 30-story project and the 60-story deal with Ruffin.

Ruffin would also lease the site and try to buy the Toots Shor lease for Equitable.

• Short-Lived Deal—In point of fact, this deal never got beyond the option stage, and was dead within 10 months.

Ruffin and his partner, John W. Galbreath, who was a friend of Shor's, spent the rest of 1956 going after the Shor lease. Shor had given his lawyer, Arnold M. Grant, power to negotiate because, "what do I know about real estate?"



PERCY URIS heads giant firm that has taken over the Sixth Avenue site.

Ruffin says that dickering was interminable and fruitless. "We negotiated and we negotiated," he says. "We offered him a big amount of cash for his lease in addition to a new restaurant in the corner of the site." Ruffin won't say what the "big amount" was; Shor says it was \$1-million and a four-story restaurant.

From here on the negotiation story has two versions. Shor says he agreed to take \$1-million plus a restaurant. "I know there was a deal set," he adds. "I even had plans drawn of the new restaurant. They were going to give me \$100,000 down, and the rest the day I opened up again."

Ruffin denies bitterly that there was any agreement, and claims Shor wanted \$1.5-million and the restaurant.

• Drastic Plans—Finally, Ruffin says he decided to build around Shor. "The lease would run only a few more years, then we would be able to tear down the building, and Shor would get nothing." At this point, though, Equitable balked. The insurance company was becoming disenchanted and began to think of pulling out altogether. It had several reasons:

Ruffin hadn't turned up enough
tenants

 Costs had risen steadily in the four years Equitable had spent assembling the site. Trunk, Beck, Galbreath, and Ruffin hadn't bought the Shor lease, and the insurance company had no intention of paying \$1.5-million for it.

 Realty men and builders believe that the New York State Superintendent of Insurance had intervened, telling the company it was investing too much in the Sixth Avenue area. There is no law or rule limiting the amount that an insurance company may sink as an investment in one neighborhood. but the Superintendent's words carry great weight. When an insurance company is building for its own use the Superintendent's office has a large measure of control. At the time, Equitable was lending \$50-million for construction of the Time & Life Building, was committed to lend Ruffing, was committed to lend Ruffing. All three buildings were within a few hundred feet of each other. Equitable refuses comment on this story. Spokesmen for the Superintendent say: "We don't know that we said anything."

Early in 1957, Equitable asked Ruf-

Early in 1957, Equitable asked Ruffin to give up his option on the site. With no big chunk of his own money in the project, Ruffin agreed, though he says it was "reluctantly."

Equitable made one last stab at getting its building, trying to interest Rockefeller Center, Inc.—which is a builder as well as a manager and owner of office buildings—to take on the job. Rockefeller Center refused, since what it wanted to see was a hotel across from its own buildings.

II. Zeckendorf Moves In

News travels fast in the tight little world of New York real estate. One of the first to hear that Equitable wanted to pull out—and the first to do anything—was William Zeckendorf.

One of Zeckendorf's first stepseven before he approached Equitable—was to get in touch with Shor. As Shor tells the story: "I went up to Zeckendorf's office. It was in the winter of 1957. He and his son, Bill, Jr., offered me \$1-million, first. I turned it down. Then they went up to \$1.2-million or \$1.3-million. I still said no."

Shor heard no more for several months. Zeckendorf had turned to negotiating with Equitable and with lenders. In May, 1958, he secured an option to buy the site from Equitable. In turn, Equitable agreed to buy the site of Manhattan's 120 Broadway, which was owned by Webb & Knapp. A spokesman for Equitable says the two deals were part of a swap; Zeckendorf says the 120 Broadway site "was not part of the deal" for the Sixth Avenue site.

 Dual Needs—With the option signed in May, Zeckendorf had until October to secure two things: the money to pay for the site, and Shor's lease.

First, he worked out a sale-leaseback with lenders that would get him not only money for the site but some construction money as well. He hadn't announced it at the time, but Zeckendorf was already planning "the greatest hotel ever built"—to be called the Zeckendorf.

In detail, the plan called for the Chase Manhattan Bank to lend Zeckendorf \$17.5-million to pay Shor for his lease and Equitable for the land. Then



LAURANCE ROCKEFELLER rejected overtures of everyone except Uris.

Zeckendorf was to sell the land to Prudential Insurance, which in turn would lease it back to him. Pru would also advance \$27.5-million to help build the hotel; that left \$35-million to \$40-million for Zeckendorf to raise. The closing was planned for October, which would give Zeckendorf time to work on Shor.

Here Shor takes up the story. "Sometime in August, 1958, my lawyer, Arnold Grant, called me and said, 'I can

get vou \$1.5-million."

A couple of days later, Shor says, Grant called him back. "He said he had \$1.5-million and a promise from Zeckendorf to help me find a new restaurant. I took it."

· The Closing-On the night of Sept. 8. Zeckendorf, representatives of Equitable and the lenders, a score of lawyers. and Toots Shor convened at the Chase Manhattan main office, for a closing that wasn't hammered out until early the next morning.

After five years, Equitable had given up its site and its plans, and had taken over the land at 120 Broadway. For a fleeting moment. Zeckendorf owned the site; then he turned it over to Prudential, getting a lease on the land and a promise of a loan to build a hotel. Shor had finally sold his lease.

In February, 1959, Zeckendorf announced plans for a 48-story, \$66-million hotel with 2,000 rooms plus offices. He then spent \$21-million digging out the foundations. When the hole was 200 ft. wide, 450 ft. long, and 50 ft. deep, activity stopped. Zeckendorf was having trouble finding investors to take some of the estimated \$40-million equity he needed. "We had 25% of Zeckendorf says. "It was all Webb & Knapp money.'

The \$40-million estimate was based on construction costs of \$66-million. Actually, the elaborate hotel would have cost closer to \$80-million. This would have meant that Zeckendorf needed to get at least \$50-million.

· Investors Wary-Until early this year. Zeckendorf hunted for investors. First he tried "wealthy investors" then. "companies that might want to take participation." No one was interested.

"It was our fault they weren't," Zeckendorf says today. "We could have changed the design. It was an expensive one at \$30,000 a room.'

Investors might have shied off from any hotel. Not one had been built in New York in 30 years, so contractors had no experience to go on and no one could figure just what the return on

his money might be.

Zeckendorf, like Equitable, made a last ditch effort to interest Rockefeller Center, Inc., which was known to think the city badly needed new hotels, especially one near its own buildings. But the Center turned him down, and Zeckendorf still wonders why. "They gave us reasons not comprehensible to us," he says, though he won't say what the mysterious explanations were. Officials at Rockefeller Center won't talk at all. In the trade, the feeling is that Rockefeller didn't want to mix its own quiet, conservative brand of operation with Zeckendorf's bolder and more flamboyant methods. Finally, last spring, Zeckendorf decided to sell out. He says that when this news got out "offers came our way in a hurry. Everybody likes a fire sale."

III. Enter Uris-Rockefeller

It didn't turn out to be a fire sale: in the end, Zeckendorf sold his lease to Uris Buildings for \$8-million.

Percy Uris, whose firm has put up 14% of all New York's new office space, tells it this way. "Zeckendorf is a friend of mine, but he knows as much about building as I know about being an aviator. I said it made no sense to put up a hotel on the site. He called me again later and I told him I might be interested in an office building. Then I said he ought to talk the idea over with the Prudential, but he said he wouldn't. I found out later that he did.

"A few weeks later, one of us herenot me-was at Prudential on another matter. The conversation got around to the Sixth Avenue site-Prudential brought it up-and we told them it was better fitted for an office building.

Uris savs this made Zeckendorf furious, that the latter phoned to say that the site was none of Uris' business, and that the lease belonged to Zeckendorf and Webb & Knapp, not to Prudential. "I told him Prudential brought it up," Uris says, "and he finally got on his horse and confirmed this.'

Prudential itself refuses to comment on this story.

Zeckendorf's version of the affair is much shorter and less specific. "Some people went to Prudential without our permission," he says, not naming Percy Uris. Then he goes on, "Uris approached us with a price of \$8-million cash, which we accepted. Why wouldn't we? We made \$23-million." Zeckendorf had spent \$2½-million on digging the hole. He also had deposited \$3million with the Pru as part of the leasing agreement.

At last, in July, Zeckendorf and Percy Uris made a joint announcement. Zeckendorf said he was selling the lease to Uris. Percy Uris said he would build

a 42-story office building.

• Note of Irony—For Zeckendorf, the surprise came a month later. Ironically Uris revealed that he had not only induced Rockefeller Center. Inc., to join him, but that it had agreed to the office building instead of the hotel it had favored. In exchange, Uris agreed to help put up a hotel two blocks away at Sixth Avenue and 53rd Street.

A spokesman for Rockefeller Center gave this explanation. "We always thought the 51st Street site was a good one for a hotel. But it was an expensive one with high carrying charges, and it would be six months before so much as a plan could be drawn. We saw

the economics of it.

Realty men offer another explanation. Uris is known for building "wedding cake" structures that look like blocks "wedding piled on one another. Such buildings are extremely profitable, with a maximum of rentable space. So, the reasoning goes, Rockefeller joined Uris to be sure of forestalling one more "wedding cake," and getting something more like the shafts of existing Rockefeller Center, which are admittedly less profiable.

Two weeks ago, an architect's drawing of the Uris-Rockefeller building showed it to be a shaft soaring up from a broad base that covers the whole site.



WILLIAM ZECKENDORF whose plans for fancy hotel fell through.



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Steps to Stop the Gold Drain

At long last, the U.S. and its major allies have begun taking some effective steps to relieve the pressure on the dollar and stop the continuing drain on this country's gold stock. It would have been far healthier if, both here and abroad, this problem had been faced boldly long ago. The final recognition of it, however belated, is welcome all the same.

This week, President Eisenhower issued a series of emergency directives to various government agencies, designed to cut down the drain on dollars that has resulted from our military spending abroad and from our aid programs (page 48).

The President's dramatic moves came as the climax to several steps that have been taken in the past few weeks to relieve the situation and to discourage the speculators who were betting on an eventual devaluation of the dollar:

• Three weeks ago, the Bank of England reduced its bank rate from 6% to 5½% as a means of reducing the differential in short-term interest rates between New York and London.

• Last week, the German Bundesbank finally lowered its discount rate from 5% to 4%.

• Meanwhile, our own Federal Reserve System abandoned its long-cherished "bills only" policy, under which it had confined its open market operations to the shortest-term government securities. The new policy of "bills preferably" puts the Fed in a position to feed more credit into the U. S. economy without driving short-term rates down toward the vanishing point.

• The German government announced that it is planning a big increase in its foreign aid program for underdeveloped nations. It is putting together a fund of almost \$1-billion and abandoning its policy of tying all loans to the purchase of German goods.

As a result of these moves, the threat of a real run on the dollar seems to have subsided—for the moment at least. The combination of official action and the strong statement that Sen. Kennedy issued just before the election (BW—Nov.5'60,p25) has discouraged the speculators who were betting on devaluation. The London gold market, which went as high as \$40 an oz.—\$5 over the U.S. Treasury's price—has settled back to a modest premium.

It is obvious, however, that neither the President's program—drastic though it is—nor the various cooperating moves abroad will be enough to correct the fundamental difficulty. They will gain us time; they will convince the world that we mean business at last. And for that reason they are highly welcome. But they do not go to the heart of the balance of payments problem.

That problem arises fundamentally because the U.S. is now carrying more of a load in overseas military costs and aid to underdeveloped nations

than any one country can sustain indefinitely. Lately the situation has been aggravated by heavy movements of capital abroad.

All of our allies, and particularly West Germany, must be prepared to shoulder a greater portion of the burden. The expanded program of aid that the Germans announced this week is a step in the right direction, but it does not go nearly far enough.

These are points that Treasury Secy. Robert B. Anderson and Under Secy. of State Douglas Dillon will have to make in their coming visit to Germany's Chancellor Adenauer. To drive them home, our delegates can show that our balance of payments deficit in the third quarter was hitting the alarming rate of \$4.3-billion a year and that our gold stock seems sure to slip below \$18-billion any week now.

The steps that have been taken to relieve the pressure on the dollar did not come a moment too soon. They must now be followed up with a broad program to close the gap in our balance of payments and put the integrity of the American dollar above suspicion.

Reassurance on Spending

The new McGraw-Hill capital spending survey is, on the whole, reassuring. Business is planning to spend \$35-billion on new plant and equipment in 1961—only 3% less than it did this year (page 46).

Obviously, this decline is good news only in the most relative of senses: It's a much smaller decline than many observers—including some highly respected business analysts—have been expecting.

Indeed it's possible that the figures reported by business corporations in this preliminary 1961 survey are too high. The profit squeeze and the likelihood of some further decline in industrial production in the months ahead could bring about further downward revisions of business spending plans.

But the crepe hangers' case is still a speculative one. As of October when this survey was taken, business knew just what it was up against: Steel was operating at 52% of capacity and all manufacturing at 79% of capacity. U.S. industry nevertheless said it was planning only a 3% cut in capital outlays next year. A number of industries—electrical machinery, autos, chemicals, food and beverages, petroleum and coal products, and electric and gas utilities—even planned modest increases.

This is not a picture of imminent panic or depression. On the contrary, it would appear to be a fairly moderate instance of the kind of cyclical decline to which our economy—and all other free economies—are periodically subject.

Continued business assurance—and a wise government policy of a contra-cyclical nature—can keep this situation in hand and, in time, improve it.



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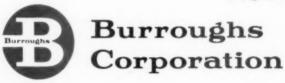
STORAGE COLLECTION

BURROUGHS ELECTRONIC ACCOUNTING MACHINES STEP UP SPEED AND EFFICIENCY OF BANK ACCOUNTING AT THE FIRST NATIONAL BANK OF MIAMI

The scene: beautiful First National Bank of Miami, Fla., where interior design by Florence Knoll is as contemporary as the bank's operating methods. The job: posting regular and special checking accounts. The equipment: Burroughs F-4200 Electronic Accounting Machines for bank bookkeeping. The results: as reported by Senior Vice President Ray F. Basten: "This equipment, with its electronic efficiency, maintains our standard of quality while keeping pace with our rapid growth. In addition, its high level of performance has improved our control of costs, has enabled us to improve customer service and has reduced operator training time, too."

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